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.



HISTORY OF EDUCATION

BY

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MANUAL ARTS AND HOME ECONOMIES SANTA BABBARA, CALIFORNIA

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PREFACE

THE thematic purpose of this volume is to show that historically education has been a progressive adjustment of claims in the exercise of human freedom. In the beginning, and as long as the human race was young, the rights of the individual were largely sacrificed to the claims of some stronger social whole, as in Egypt, India, Persia, and Sparta. In the Golden Age of Greece and the Roman Republic the individual attained to a larger measure of freedom, which, however, at length broke down completely when the republic gave way to the empire, into which Greece also became merged.

When Christianity swept over the Roman Empire, it exalted the individual, with gain to the social whole. This exaltation was a gain to the social whole, as well as to the individual, because God's will became the ideal norm of human freedom. The disruption of the empire by the northern hordes paved the way for the despotic subordination of human freedom to the control of the Church as the human representative of God on earth. The Renaissance was an extreme revolt of the individual. In its first phase it was a reversion to Greek paganism; in its second, namely, the reformation of the sixteenth century, the Renaissance distinguished sharply between the institutionalism of the Church and the fundamental claims of religion, revolting only from the former and yielding with absolute surrender to the holy will of God, thus returning to the position of early Christianity.

PREFACE

The formalism into which the reformation as an educational movement hardened, as in the gymnasiums of Sturm and the Jesuits, again defeated this ideal adjustment of claims, thus giving rise to new conflicts in behalf of human freedom. Among the most important postreformation movements in behalf of human freedom we may enumerate realism and naturalism and the religious concomitant of both, namely, pietism in its various forms. The educational movements beginning with Pestalozzianism all exalt the individual along lines that perfect the social whole and subordinate both to the ultimate purposes of God, with infinite gain to both the individual and society. In short, the course of events, as we shall see, clearly shows that any system of education which failed to adjust human relations to divine purposes gave way in time to something more promising, and that the hope of finally adjusting all conflicting claims should be the teacher's supreme ideal. This thematic purpose of the volume should be kept in constant view, for only thus will the student of education attain to the professional perspective, to that holier vision, that compelling inspiration, without which he cannot become morally identified with the great cause for which he is to labor and to pray. This idealism, this stimulating vision, is best attained by beginning at the beginning, and coming up to the nearer present without delay, thus attracting the learner by the novelty and imperfection of the far past and producing at the same time that sustained interest which proper approach to dramatic climax assures.

It is evident that the study of educational ideals or problems must be based upon the study of the complex history which produces them. These historical connections have been woven into the web and woof of our text. It must be the major task of the volume to exercise the student of education in this argument of cause and effect, the origin of educational problems and their solution in school systems. Such training should make him an expert interpreter of his own profession and a contributor to the cause which he is to serve. We have tried to heighten this effect and to enrich the laboratory of our educational problems by bringing the student into intimate biographical relation with the fertile and forceful personalities to whom educational systems owe their origin, success, or failure.

The practical purpose of the volume should be evident enough. The historical perspective to which such thinking leads produces spiritual comradeship with the great reformers, and thus acts as a powerful professional stimulus. The unceasing challenge of the student's judgment in the solution of problems by the great reformers, the measure of success to which they attained in the system of means to ends proposed, the estimate which he is constantly called upon to make as he passes from century to century, from nation to nation, from reformer to reformer, should certainly help to qualify him for the expert manipulation of means to ends in his own tasks. To insure this result as much as possible, the student of this volume is constantly required to compare the whole past with the present, find fitness or unfitness of means and ends, estimate ideals and their force, enrich his conclusions by appeals to psychology, ethics, sociology, and real life.

The writer acknowledges with profound respect the debt he owes to the authorities whom he consulted in the preparation of this volume, and to Doctor Ellwood P. Cubberley, who read the manuscript, for his courtesy,

PREFACE

appreciation, and helpful suggestions. The volume is dedicated with pleasure to thousands of graduates with whom long and happy association has made the volume possible, and to many thousands still on the way to the schoolroom. That the work may serve its purpose is his sincerest hope.

CHARLES C. BOYER.

STATE NORMAL SCHOOL, KUTZTOWN, PA., July 1, 1919.

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HISTORY OF EDUCATION



HISTORY OF EDUCATION

PART I

EDUCATION OF THE ANCIENTS

ORIENTAL NATIONS

Even savages have to learn how to live, and this process is really education, but a description of such primitive education, however interesting it might be from an antiquarian standpoint, could have no legitimate place in a treatise designed for the normal school and college curriculum of the twentieth century.

The same things have been said, and with some justice, about the space devoted to the second stage of education, that of "barbarism," best represented by the Oriental types of China, Shemite Asia, India, Persla, Egypt, but there is a difference. The very "onesidedness" and "strangeness" of these Oriental systems challenge the twentieth-century mind, and thus make them good "first subjects" in the great process of apperception by which we finally learn to "think" our century. But when that much has been said, we must admit that the briefest possible treatment is all that good pedagogy requires.

CHAPTER I

EDUCATION OF THE ANCIENT EGYPTIANS

THE EGYPTIANS

The ancient Egyptians were Hamites from western Asia, from which starting-point their migration into the valley of the Nile was probably dictated by ease of access and wealth of prospects. The incomparable fertility of the soil produced by the annual overflow of the Nile assured rapid growth of population. Under the favorable condition of this habitat, the Egyptians attained to a high state of civilization centuries before all others.

Kings.—The Hamites, known in Holy Writ as Cushites, had existed in little states along the shores of the Indian Ocean, Persian Gulf, and Red Sea, probably for centuries before a powerful chief, Menes, made himself master of the Nile valley from the sea to the cataracts of Syene, and founded 5000 B. C., if not earlier, the first race of kings known to history. It was the beginning of a long succession of ambitious and glorious dynasties.

About 2050, B. C., if not earlier, the Hyksos, or Shepherd Kings, said to be the Hittites of the Bible, overthrew older kingdoms of Memphis and Thebes, and reigned until 1500 B. C. It was in this period that the Jews found a home in Egypt.

About 1200 B. C. the great Amosis expelled the Shepherd Kings and established an empire. The greatest monarch of this age was Rameses II. He extended the empire by conquests far beyond the confines of Egypt, and in his long reign of almost seventy years produced a golden age in architecture, sculpture, painting, literature, science, philosophy, and commerce, etc. Presently, after several short revivals, as under

Presently, after several short revivals, as under Shishak who plundered Jerusalem in 970 B. C., and under the kings of the twenty-sixth dynasty, Psammetichus and his son Necho, who established and maintained most important relations with Greece, the empire began to decline. Necho died 601 B. C.

Cambyses, King of Persia, conquered Egypt in 525 B. C., and Alexander of Macedon, in 332 B. C. The history of ancient Egypt had closed.

Religion.—Over and above all else, the one everpresent, all-explaining thing in the life and mind of ancient Egypt is *religion*.

Among the Egyptians, as probably among all the ancients, primitive knowledge of a Supreme Being the result of special revelation—became corrupted into a confusing system of nature-worship, but the Egyptians more than all other ancients reduced this natureworship, in form at least, to a repulsive worship of animals.

Gods.—An early recognition of the complex dependence of Egypt upon the Sun and the river Nile remains the fundamental conception of theology. This conception is seen, for example, in Osiris, the sun-god, who after a nature conflict with Typhon, or Set, the evil one, became the king and judge of Hades. The Nile fertility of Egypt is divinified in Isis, who thus becomes sun-goddess wife of Osiris. The seasonal power of the Sun, in turn creating and destroying, led to the conception of a mediating god, Horus, son of Osiris and Isis. This attempt of the Egyptian imagination coming to the rescue of baffled reason, in the explanation of nature, gave rise to a veritable multitude of gods, all of whom must be appeased and worshipped.

Animal-Worship .- Perhaps this elaborate polytheism failed to blot out completely, at least among the priests of a smaller inner circle, the cognition of a personal supremacy above and behind all nature as its first great cause. The Greek historian Herodotus leads us to think so; but be this as it may, the priesthood as a whole, probably for selfish reasons, corrupted Egyptian religion still further by reducing it, as has been stated, to a repulsive worship of animals. The common people were taught to worship animals as symbols of deity, or as the actual residence of deity. It was in this sense that Osiris was worshipped in the Apis, or sacred ox. The cow was sacred to Isis, lions were emblems of Horus, the hippopotami to Set, or Typhon. Among other sacred animals were cats and dogs, and even crocodiles.

Immortality.—Side by side with animal-worshipping polytheism in Egyptian religion was the belief in a future state of rewards and punishments. In other words—and this is a pretty chapter in psychology the Egyptian self-consciousness, looking out of its body-house, began to have a conception, vague as it may have continued to be, of soul-immortality, long before the Jewish race came into being. But, as we should expect from a people who would stoop to worship animals, they looked upon this other life in wonderment—as in a dream—even as the Sphinx,* animal

* Myers' "General History."

in body, human-headed, looks out over Egypt. We are not surprised, therefore, to read in the papyrus "Book of the Dead" about a "Hall of Judgment," and about the "Transmigration of the Soul." There was a "Trial of the Dead" in the court of Osiris, where the cause of the soul must be pleaded, and the soul itself weighed against a statue of justice, in the presence of forty-two judges. The acquitted soul joined the throng of the blest. The soul rejected as unworthy of the Egyptian heaven was driven off and compelled to reappear on earth again, assuming the form of various animals until after a long course of expiation -thousands of years, perhaps-it might return purified to its old body. The custom of carefully embalming the body of the dead probably arose from this belief that the soul would return. The fact that this process, connected with elaborate burial services, became one of the strictest duties of the priests,* confirms this idea.

The religion of Egypt produced the best literature which Egypt has contributed, namely, the "Book of the Dead," already mentioned, and Prince Phtahhotep's "Book on Morals." And yet this religion did not fill Egypt with gloom, as the songs and stories prove.

Castes of Egypt.—The minute intricacy with which religion was woven into the life of Egypt, by making the priests eminently necessary, placed them in effect at the top of the social fabric, its masters and the shapers of its destiny. As a class the priests were, of course, very numerous and punctilious in their life. Nevertheless they were not in any forbidding sense ascetic.

* Lord's "Ancient Religions," pp. 38 and 39.

The king himself belonged to them, and the high priest was usually a member of the royal family. They were emphatically and solely the learned class. The priesthood thus included the poets, the historians, the expounders and administrators of law, the physicians, and the magicians who did the wonders before Moses.

Next to the priests of ancient Egypt stood the soldiers. They constituted a powerful order, a wellorganized militia, and supported by a fixed portion of land, free from all taxation. The soldier could till his own land when not under arms, but could follow no other occupation.

The castes below the priests and soldiers had no civic privileges and could not own land. The farmer who tilled the land paid his rents in produce to the ruler or to the priests who owned it. The herdsmen were the lowest caste. The swineherds were regarded as outcasts and were not allowed to enter the temples.

The castes, however, were not rigidly separate, as in India. Accordingly, "members of the different orders might intermarry, and the children pass from one caste to the other by hereditary occupation."

Architecture.—The architecture of ancient Egypt, as we are prepared to see, was, like its literature and social system, prevailingly religious. The sublime remains of Egyptian architecture are not palaces but temples and tombs. The pyramids, the wonder of all centuries, were not simply monuments of ambitious kings, but tarrying-places for the soul till judgment be fulfilled. Sculpture and painting, the handmaids of architecture, were certainly dominated by the same overpowering sense of immortality. This conclusion is supported and emphasized by the invariable choice of enduring stone as building materials, and by the massiveness of the conceptions.

EDUCATION

The foregoing analysis of life and mind will enable us to understand Egyptian education as a system of means to ends.

Ends in View.—The above analysis shows that, apart from the powerful educational influence of the Nile, religion as a means to happiness in the life that is and a life to be was the one thing needful. This primary purpose, including its stress on morality, however, as we shall see, does not exclude or even belittle the second, or other purpose, namely, preparation for life in the land of the Nile. In this rainless land, the water poured into Egypt by the yearly inundations had to be conserved in artificial lakes, such as Lake Mœris may have been, and distributed in dry seasons east and west over the land by means of artificial waterways. Moreover, it was quite as necessary to defend the lowlands against destructive inundation. Thus arose engineering, including mathematics, and also the mechanics' arts. Agriculture, weaving, making woollen goods, ironware, glass, etc., were highly developed. Commerce made writing and arithmetic great necessities.

Primary Education.—In Egypt women were often held in honor, and as in Turanian lands and among the Jews, they were not wholly excluded from the privilege of education, but their opportunities, except at the court of the kings, were usually meagre. The state, as is well known, provided no educational system for the masses. For them life itself was an apprentice school, somewhat as among the chosen people in the early days, and in startling harmony with the modern principle of education that the accessible world of the child should be the school laboratory. The masses, however, owing to the interests of the priests, were not wholly neglected in religious and moral training. The needs of the artisan class must have called for at least a little writing and arithmetic.

Higher Education.—In Egypt higher education was very special—the privilege of the priests and the nobles. The curriculum included writing, mathematics, engineering, architecture, law, medicine, astronomy, literature, art, religion, morals, etc.

For many centuries, up to the time of the empire, as reliable historians tell us, the court of the king was the centre of Egyptian life, and thus became the place where the sons of the wealthy went to school with the sons of the king. The curriculum of these court schools, as we judge, must have been quite complete. Under the empire the curriculum became more specialized, and schools of instruction were attached to the various departments of the government, and the department officials supervised a kind of apprentice training. The priestly class, including all the great professions and the finer arts, obtained their education from "temple colleges," and the priests themselves did the teaching.

The methods of Egyptian education deserve attention. Inasmuch as the hieroglyphics, about a thousand in number, varied all the way from pictures to phonetic letters, industry coupled with flogging became the accompaniments of drill. As soon as sufficient writing skill had been acquired, the boys were required to copy stories, poems, ethical precepts, rules of etiquette, and the like, but rather as a means to the end in "fine writing" than training in content. The lessons in arithmetic were extremely practical, running largely into weights and measures. The study of astronomy was not so successfully correlated with mathematics as among the Babylonians. The study of medicine was vitiated by admixture of magic and incantation.

Estimate.—(1) The Egyptian valued the soul above the body and the future above the present, which as an educational ideal, can never be surpassed; but in practice the soul and the future were sacrificed to superstition. (2) The Egyptian doctrine of a future state of rewards and punishments is, as psychology shows, the only sufficient moral motive, but in Egypt this motive was robbed of its moral worth by substituting ritual sacrifices for character as character. (3) The caste system produced professional experts, but sacrificed, though not completely, all the lower classes, and even the offered expert professional training guaranteed no real freedom of individuality. (4) The educational methods of ancient Egypt were not wholly bad, and yet science was never taught as science; art-even her highest art, architecture-never found its emancipation from stiff convention; philosophy, lofty in its aims, never found the true God. (5) The course of culture in ancient Egypt shows that all the great problems of life and mind were approached by this first race of men, and this fact in turn argues powerfully in favor of the doctrine of the oneness of origin of all races.

REFERENCES

I. Myers' "General History."

2. Sanderson's "World History and Its Makers."

3. Lord's "Ancient Religions."

4. Monroe's "Cyclopedia of Education."

5. Graves' "History of Education Before the Middle Ages."

6. Davidson's "History of Education."

QUESTIONS

r. Who were the ancient Egyptians? Account for the early civilization of this people.

2. Discuss Menes as the founder of the first royal race in history.

3. Account for the Hyksos, and explain the course of their reign in Egypt.

4. Say what you can of Amosis and the greatness of the empire which he founded.

5. Trace the decline and fall of ancient Egypt.

6. What is the one ever-present, all-explaining thing in Egyptian life and mind?

7. Tell how this probable belief of primitive Egypt in a Supreme Being became corrupted into a confusing system of nature-worship.

8. Make the Egyptian priests responsible for the gross practices of animal-worship.

9. Explain, as a chapter in race psychology, the Egyptian belief in a future state of rewards and punishments, and the moral corruption of this doctrine. What literature did the belief produce?

ro. Tell how the Egyptian priesthood attained its ascendancy and used it in the resulting caste system.

11. Show in detail that the prevailing motive in Egyptian architecture and allied arts is religion.

12. Account for the two correlated ends in view in Egyptian education, going into full details.

13. Describe the curriculum and explain the methods of primary education in Egypt, going into full details.

EDUCATION OF THE ANCIENT EGYPTIANS 11

14. Explain the higher education of Egypt in the old kingdom and in the empire, going fully into the details of curriculum and method.

15. Point out the worst and the best things in Egyptian education in the light of ethics and psychology.

r6. How do the attempts of this earliest race of civilizable people to solve great human problems affect the modern conclusion of evolution?

CHAPTER II

EDUCATION OF THE ANCIENT CHINESE

THE CHINESE

As a Race.—By race the Chinese are Turanians. They now occupy a country somewhat larger than the United States, with a population about four times as large. Authentic Chinese history, if we may believe their own writers, covers a period of four thousand years. The most conspicuous Chinese race quality is self-complacency. Geographical isolation added dislike of foreigners to self-complacency. Extreme nonprogressiveness was the inevitable consequence. The race passed through a short youth, a period of inventive production, but this youth failed to grow up. After inventing gunpowder and printing, and other arts, the Chinese lapsed centuries ago into deep ruts. In time respect for ancestors became a sort of religion among them. For centuries it was enough for the Chinese to think what their ancestors thought, to love what they loved, and to do what they had done. This ancestral ideal finally found a voice in the famous Confucius.

CONFUCIUS

In the Making.—Confucius, meaning Kong the Teacher, is the name by which the Western world best knows the most famous Chinese sage and moralist. He was born about 550 B. C., the son of a prime minister of the province of Loo. At the age of fifteen he devoted himself to learning, and continued to be a student as long as he lived. He was deeply impressed by the moral and political degeneracy of the age in which he lived, and thus became a reformer.

Contributions.—(1) After filling several political offices of trust with great credit to himself, Confucius, now twenty-two years of age, assumed the task of public teacher, and his house became a school for young men eager to study the teachings of the ancients. At thirty-five he began to tour the empire, teaching as he went. The tour lengthened into years-eight of themfruitful years. Political preferment came to him again and again, but teaching and writing continued to be his passion. (2) "The literary labors of Confucius were very great, since he made the whole classical literature of China accessible to his countrymen. The fame of all preceding writers is merged in his own renown. His works have had the highest authority for more than two thousand years. They have been regarded as the exponents of supreme wisdom, and adopted as text-books by all scholars and in all schools in that vast empire, which includes one-fourth of the human race. To all educated men the 'Book of Changes' (Yih-King), the 'Book of Poetry' (She-King), the 'Book of History' (Shoo-King), the 'Book of Rites' (Le-King), the 'Great Learning' (Ta-heo-King), showing the parental essence of all government, the 'Doctrine of the Mean' (Chung-yung), teaching the golden mean of conduct, and the 'Confucian Analects' (Lun-yu), recording his conversations, are supreme authorities; to which must be added the works of Mencius, the greatest of his disciples. There is no

record of any books that have exacted such supreme reverence in any nation as the works of Confucius, except the Koran of the Mohammedans, the Book of the Law among the Hebrews, and the Bible among Christians. What an influence for one man to have exerted on subsequent ages, who laid no claim to divinity or even originality—recognized as a man, worshipped as a god !"*

When Che-Hwang-te, or Hoang-ti, the only progressive emperor China ever had (221 B. C.), realized that the Confucian classics hindered his reforms, he buried their champions alive and ordered the books to be destroyed. Reverence for these books caused loving hearts to find hiding-places for them, and when the king died the books were brought out of their hidingplaces, but it was not until the accession of the Han dynasty, 206 B. C., that the reigning emperor collected the scattered writings of the sage and exerted his vast power to secure the study of them throughout the schools of China.

CHINESE SCHOOLS

For centuries before and after Confucius primary education was highly esteemed, and practically universal. And there were higher institutions of learning.

Primary Schools.—The Chinese made no formal provisions for the education of girls. The boys began to go to school at the age of six or seven. Reading as the key to the classics was the subject *par excellence*. Writing, arithmetic, and such human relations as obedience, justice, and mercy were added to the course.

* Lord's "Beacon Lights of History."

There were no schoolhouses in the modern sense of the term. The school was kept in the house of the teacher or other convenient place. The pupils studied out loud, repeating the teacher's statements. The main purpose was to memorize, not to think. The Chinese language is ideographic rather than alphabetic. More than fifty thousand words or signs are employed, but they are not related by declension, comparison, or inflection. At least five thousand of these characters must be mastered in order to read well. It is not a wonder, therefore, that the great majority of Chinese boys left school very young, and that they were somewhat disobedient in their school tasks. Inasmuch as disobedience at school was serious to the whole scheme of Chinese ancestral reverence it was sufficient cause for severe punishments, among them castigation, starvation, and imprisonment.

Higher Institutions .- The value which Chinese ancestral consciousness placed upon such human relations as obedience to parents and rulers, social justice and personal righteousness made something like college courses preparing for leadership in the higher vocations simply indispensable. Talented young men would attach themselves to masters, and spend years in preparing for a series of competitive examinations, the fourth and last of which was to be held at Pekin. Among the courses offered, as the Confucian classics show, were music, poetry, history, ethics, politics, medicine, astronomy, and mathematics. All the examinations were strictly competitive. The prospect of lucrative imperial service acted as a powerful stimulus. Thousands of candidates presented themselves at intervals of three years. The examinations were written, and

lasted for days. The candidates were supplied with the necessary writing materials and worked in isolated cells or apartments, strictly guarded. Those who failed might try again. The successful candidates who failed to secure government positions, took up such other vocations as their ancestral course of studies made possible.

Estimate.-The fitness of means to ends in view in the Chinese system of education is very evident. But the perfection of human relations at which the system aimed is just as evidently impossible, apart from profound religious consciousness-and this was lamentably absent from the Chinese ancestral scheme even after Confucian reformation had occurred, for while Confucius recognized the existence of a God, he said almost nothing about religion. The Chinese mind failed to realize that direct relation of the soul to a personal God is, as psychology shows, the only final guarantee of spiritual morality. While, therefore, we recognize what an opportunity Chinese higher education was for talented men, and that the commitment of their institutional life to these talented men made for institutional contentment, we must pronounce the system, what it has proved itself nationally, a tragic human failure.

REFERENCES

1. Lord's "Beacon Lights of History."

2. Graves' "History of Education Before the Middle Ages."

QUESTIONS

I. Who are the Chinese? Account for their non-progressiveness. What accordingly was the Chinese ancestral ideal? 2. Who was Confucius? Consider Confucius "in the making." Give an account of his career as a teacher, and his work as a writer. Compare him with other famous personalities.

3. Explain the perils to which Che-Hwang-te subjected Confucianism, and how it became the dominating influence of subsequent centuries.

4. Visit a Chinese primary school. Explain the importance of reading in the school curriculum. Why so difficult? What were the results? Why was disobedience more serious than with us?

5. What were the ends in view in Chinese higher education? Consider the curriculum as means to ends. Discuss the whole system of competitive examinations.

6. What were some of the evident merits of the Chinese system of education? What are the verdicts of psychology and history?

CHAPTER III

EDUCATION OF THE ANCIENT HINDUS

THE HINDUS

About 2000 B. C. hardy, warlike Aryans from the table-lands of central Asia began to press through the passes of the Himalayas into the valleys of the Indus and Ganges Rivers. These invaders are known to us as Hindus. In time they conquered the non-Aryans, who had occupied the country before them. Those non-Aryans who refused to submit to the Aryan conquerors took to the mountains, and are known as the "Hill Tribes" to-day. The inevitable commingling of conquered and conqueror produced the mass of the population of present India. This Aryan migration had two far-reaching results, namely, loss of racevigor, and social inequalities.

Loss of Vigor.—The luxury and leisure which succeeded the conquest of India with her wealth and softness of climate changed a rugged and warlike race into a pacific and contemplative race. This explains why the Hindu conquerors were subsequently conquered themselves, first by Alexander the Great, 327 B. C., then by the Mohammedans in the tenth century of the Christian era, by the Mongols in the thirteenth, and last of all by the English, to whom India gave a new empire of two hundred million souls.

Castes of India.—The Aryan conquest of non-Aryan India, had a second far-reaching result, namely, a

rigorous caste system. The Hindus as a race are deeply religious. Thus it came to pass that although the military class was in the ascendancy during the long period of invasion, the priestly class, aided by climate, gradually became the dominant class. The Hindu priests are called "Brahmans," after Brahma their God. This "learned class" comprises not only priests, but lawyers, physicians, teachers, scholars, etc. Next to the Brahmans come the "Kshatriyas," comprising not only the military but the governing class. The third caste, consisting of farmers, artisans, and merchants, and constituting the backbone of India, are called "Vaisyas." The conquered non-Aryans, or slaves, are called "Sudras." The very ancient book of Hindu laws, called the "Institutes of Menu," regulates these class divisions, a violation of which produces the "Pariah," or outcast.

Brahmanism.—Hindu poets writing in Sanskrit, the oldest Aryan language, if not the oldest of all languages, produced poems, or hymns, known as *Vedas*. These poems are really the sacred books of the Hindu religion, or Brahmanism. The Vedas show that Hinduism, or Brahmanism, originally rests upon the belief in an all-pervading mind, from which the universe took its rise. From this vague deism the Vedas slip unconsciously into the belief in Brahma as the creating god, Vishnu the preserving god, and Siva the destroying god. "This was further corrupted into pantheism, which sees a god in everything—in sun, moon, stars, the Ganges, the Indus, beasts, and flowers."*

"In its higher development Brahmanism holds that the human soul is of the same nature with the supreme

* Sanderson's "World History," p. 19.

being, and that its destiny is to be reunited with him. This led to the great doctrine of metempsychosis, or transmigration of souls, which is necessary to purify the human soul for union with the divine. According to this view man's soul in this world is united to the body in a state of trial, which needs prayer, penance, sacrifice, and purification. If these are neglected then the human soul, after death, is joined to the body of some lower animal, and begins a fresh course of probation. In popular practice, gross idolatry and superstition, with a cowardly and selfish disregard of human life, have largely prevailed alongside of the philosophical tenets of the educated class." *

Thus "Brahmanism became corrupted. Like the Mosaic Law, under the sedulous care of the sacerdotal orders it ripened into a most burdensome ritualism. With the supposed sacredness of his person, and with the laws made in his favor, the Brahman became intolerable to the people, who were ground down by sacrifices, explatory offerings, and wearisome and minute ceremonies of worship. Caste destroyed all ideas of brotherhood; it robbed the soul of its affections and aspirations. Like the Pharisees in the time of Jesus, the Brahmans became the oppressors of the people." † This corrupted Brahmanism was reformed, or restored to its pristine form with its logical conclusions, by Buddha.

Buddha.—(1) Buddha was not a Brahman, but a Hindu prince, and therefore of the Kshatriya caste. He was born about 550 B. C., and reared in a district where Brahmanic teaching was greatly modified

> * Sanderson's "World History," p. 20. † "Beacon Lights of History," p. 80.

by contact with older native religion.* His father brought him up in ignorance of the wickedness and sorrows of the world. When in his young manhood he began to study India and its sorrows, he gave up his princely life and became a hermit. After years of profound contemplation and painful self-torture, he became convinced that not self-torture but philanthropy, self-control, and other moral virtues were the way to soul-peace, or Nirvana. Henceforth he gave up his princely name, Gautama, and called himself Buddha, meaning "the enlightened one." (2) He spent the rest of his life—almost half a century—as a teacher, wandering from city to city, gathering about himself disciples, and striving to make the world happier through goodness and kindness and brotherhood. He denounced the caste system and the distinction between Aryan and non-Aryan as a delusion. Neither wealth, nor poverty, nor sex, nor any other condition was to be a barrier to hope and opportunity. (3) For a while Buddhism swept corrupted Brahmanism fairly out of place in India, but although temples were built for Buddha, and he was worshipped as a god, Brahmanism regained its supremacy in India.

HINDU SCHOOLS

Brahmanism defines the final purposes of Hindu education in terms of caste, and thus determines both curriculum and form.

Ends in View.—The primary purpose of Hindu education was to fit the individual for life in the particular class into which he was born. The curriculum

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* Davidson, "History of Education," p. 65.

and form of education were, therefore, subject strictly to the special ends in view in each caste, namely, religious and moral supremacy, administrative and military functions, agriculture, art, commerce, and the like. Women and Sudras were rigorously excluded from all formal educational privileges. Birth rather than talent, station rather than individuality, dominated over hope.

Primary Schools.—The Hindu boy began to go to school at the usual age. He took up reading, writing, and arithmetic, but the subject *par excellence* was religion. The school-day began and ended with impressive religious ceremonies. School was kept in the open air, or when that was not permissible, in a covered shed. The teacher sat on a grass mat, and the pupils squatted round about him on the ground. The Vedas furnished reading lessons. These were dictated by the teacher and repeated after a droning fashion until memory was master. The children wrote on sand, using the finger or a stick. Later on leaves were used instead of sand, and presently paper with ink.

The castes were kept separate, but in any case the teacher had to be a Brahman. The pupils were taught to be modest and polite, but discipline was mild. Drowsiness rather than disobedience was the only serious obstacle to progress.

Higher Education.—A course covering about twelve years, and including such subjects as grammar, literature, mathematics, astronomy, medicine, law, and religion, was open to the Brahman's sons. Well-planned vocational courses were open to the governing and military classes. Provisions were made for the education of artisans, merchants, and even farmers, but these were usually more on the order of apprenticeships.

Estimate.--There can be no doubt about the fitness of means to ends in Hindu education. The extreme self-effacement to which Buddhism tended was, after all, a sore offense to the immortality dimly evident even to the pagan consciousness, and the dreamy quietism to which the body of Buddha's teaching drove its most earnest devotees throttled the active powers of the soul into lamentable slavery. No wonder that Buddhism could not hold its own against Brahmanism -no wonder that Buddhism finds its conqueror in Christ! It provides the masses with the fundamentals of vocational life and religious morality, and thus produces a sort of static social stability. It provides the great professions with an admirable curriculum, and then makes them the responsible overseers of all lower classes. The system has produced marvellous results in speculative philosophy, in mathematics, and even in science.

The charges against the Hindu system are serious in the extreme. It offers almost everything to the few, regardless of personal worth or talent, and crushes individuality, however promising, in all the other classes. Religious ritualism has filled India with idolatry and inhumanity. The exclusion of physical culture from the school curriculum has helped to reduce India to a helpless subject race. The sacrifice of Hindu woman, soul and body, is indescribably pathetic.

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REFERENCES

- 1. Sanderson's "World History and Its Makers," vol. I.
- 2. "Old Pagan Civilization," "Beacon Lights of History."

3. Davidson's "History of Education."

QUESTIONS

r. Who are the Hindus? Explain their migration into India, and the loss of race-vigor.

2. Account for the Hindu caste system, and describe the castes in detail.

3. To what writings do we owe our knowledge of Hindu Brahmanism? Explain the transition from vague deism in the Vedas to polytheism and pantheism.

4. What, according to Brahmanism, is the relation of the human soul to the supreme being? Explain the doctrine of transmigration of souls.

5. Into what corruptions did Brahmanism degenerate?

6. Who was Buddha? Explain Buddha "in the making." What did he finally come to believe? How did he serve India? Explain his failure.

7. What is the primary purpose in Hindu education? What are the specific purposes?

8. Visit a primary school of India, going thoroughly into the details of curriculum, method, and discipline.

9. Discuss higher education, considering fitness of curriculum and form to special ends in view.

10. What were the best things and the worst things in the Hindu system, as seen in the light of sociology, Christianity, and world-changes?

CHAPTER IV

EDUCATION OF THE ANCIENT PERSIANS

THE PERSIANS

The Medes preceded the Persians as a race, but were conquered by the latter and merged into them. The Persians, like the Medes, were of the same vigorous Aryan stock as the Hindus, but by making rugged Iran their habitat they escaped the loss of vigor which the Hindus suffered, and matured into a nation of warriors. Monarchy was the natural result.

Kings.—The one great ambition of the Persian kings was to build a world empire. Cyrus the Great added Media, Lydia, and Babylonia to Persia. His son Cambyses added Egypt. Darius extended the kingdom eastward to the Indus, and westward to the Hellespont, and introduced provincial governors, called satraps, to weld the distant parts of his world together more firmly. When the armies of his son Xerxes were hurled back from Greece, Persian ambition had received a blow from which, although it reappeared in Chosroes I, it never fully recovered.

In Persia the king was the state—his decree was law. But such was the sense of Persian justice, that the Persians as a social whole would not permit their ambitious kings to arrogate all power to themselves. To this end there was created a kind of king's cabinet, or council of empire, composed of princes and priests, or magi. The king was obliged to select his cabinet princes from the feudal houses that arose from wars and conquests. They were thus the accredited representatives of the Persian nobility, and by checking the despotism which inevitably attaches to worldempire, they were, in effect, the political representatives of the Persian social whole. The priests, or magi, in the king's cabinet were the representatives of God. No other representatives could have satisfied the religious sense of the Persians. In this conviction the Persian consciousness had found the only final guarantee of personal and social morals, as we moderns know more completely.

Religion .-- At their best, the Persians had arrived at religious concepts startlingly like those of the Hebrews, or Jews. They believed in one supreme, eternal God, who created all things, beneficent and allwise, called Ormazd (Ahura-Mazda); and in a personal devil, called Ahriman (Angro-mainyus), the black or dark intelligence, the creator of all that is evil, both moral and physical. They also believed that Ormazd and Ahriman were in perpetual conflict, but that Ormazd would finally prevail over Ahriman, and that the highest duty of man was to take sides with Ormazd in holiness, justice, and worship. In time corruption set in, and magism, or the worship of the elements of nature, became general. The most common form of worship was that of fire. The Persians rejected all images, and built no temples.

A collection of wondrously beautiful poems, called "Avesta," embodies the above beliefs in much detail. The magi corrupted the Avesta with enlarging commentaries. They wrote in *Zend*, a Sanskrit dialect. This enlarged Avesta is therefore called Zend-Avesta,

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and may be regarded as the bible of the Persians. The author of the beautiful Avesta was Zoroaster.

Zoroaster.—Almost nothing is known about the life of Zoroaster. Some authorities consider him a myth. A tablet recently unearthed in Greece contains an account of his life and doctrines, and seems to establish the man's historical reality. There are those who think he must have been a contemporary of Moses. Be that as it may, Zoroaster may indeed be called the Moses of the Persians, for, like Moses, he perpetuated a knowledge of God and his requirements through his writings, and thus helped to make the Persians a people greatly like the Jews in their morality.

EDUCATION

What has been said about the Persians themselves prepares us to understand their system of education.

Ends in View.—What Persia wanted most was soldiers and loyal subjects. To this royal ambition the social whole was to be somewhat sacrificed, but not without justice, and generally speaking to the satisfaction of the individual, for war and conquest brought luxury and plenty and complacency. The education of princes and priests, like that of soldiers and subjects, was most evidently only a means to an end.

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State Education.—(1) No formal education was provided for the Persian woman. She was to be the mother of children and a faithful home slave. At the age of seven her boys were taken from home and educated by the state for the state. They were quartered in large public institutions and provided with the simple food and clothing suited to the purpose. The teachers, or *overseers*, were men who had served the state as soldiers up to the age of fifty, and were selected as teachers on account of special competence in knowledge and morals. Reading and writing were taught to some extent; but, as special means to ends in view, physical culture and morals constituted the main curriculum. Running, riding on horseback, shooting with bow and arrow, were some of the physical exercises.

Religious proverbs and prayers were taught in connection with such moral habits as obedience, courage, truthfulness, and justice. Cyrus the Great once told his mother how he had learned an impressive lesson in justice. The boys were playing "court," and Cyrus was judge. A bigger boy was brought to trial for appropriating the coat of a smaller boy because the exchange of coats was "a better fit." Cyrus as judge approved of this appropriation, whereupon the overseer beat him and reversed the decision because the question at issue was not whom do the coats fit, but to whom do they belong.

(2) From fifteen to twenty-five the Persian boy was subjected to systematic military training, after which he became an integral part of the army, serving the state up to the age of fifty.

Higher Education.—There was no such thing as higher education for the Persian masses. But the highest interests of the state made higher education an absolute necessity in the case of sons of nobles and priests. As already indicated, higher education was the function of the priests, or magi. They were the "learned class" in a special sense. They knew something of astronomy in the form of astrology, and of chemistry in the form of alchemy. But their special function was to perpetuate a learned priesthood in the interest of religion as religion, and in the interests of the state as a moral institution constantly in danger of corruption by ambition. It was this very corruption that finally doomed the Persian Empire to an early and disgraceful fall.

Estimate.—The merits of the Persian system cannot be denied. Here was perfect fitness of curriculum and form as means to end. The self-representation of the Persians as a social whole in the form of the king's cabinet is startlingly suggestive of modern social evolution.

The serious side to the Persian system was the deliberate neglect of the means of popular intelligence, namely reading and writing. As a result, Persia contributed almost nothing to literature and science, and her only imitable art is palace architecture. From the fate of Persia we learn the great truth that religion and morals lose their power over a people weak in intellectual culture, and that other now almost selfevident truth that even physical culture not intellectualized is only of a lower order. To these verdicts must be added this other, that the slavish subjection of woman, by hindering the moral function of the home, helped very materially to bring about the moral and political fall of Persia.

REFERENCES

- I. Myers' "General History."
- 2. Lord's "Beacon Lights of History."
- 3. Sanderson's "World History and Its Makers."
- 4. Davidson's "History of Education."
- 5. Monroe's "Cyclopedia of Education."

QUESTIONS

I. Who were the ancient Persians? Why were they a race of warriors?

2. What was the great ambition of the Persian kings? Explain the course of empire-building.

3. What was the function of the king's cabinet? How carefully was this function guarded?

4. What were the religious beliefs of the Persians at their best? What was magism? How did Mazdeism serve the highest interests of Persia?

5. Describe the Avesta and the later Zend-Avesta? Who was Zoroaster? Compare him with Moses and other great teachers.

6. What was the final purpose of Persian education? Into what intermediate purposes can you analyze the final purpose?

7. Describe the education of the Persian masses, accounting for the whole curriculum, its institutional character, the employment of teachers, etc.

8. Describe the higher education of Persian priests and princes, accounting especially for the curriculum and the teachers.

9. What were the best things and the worst things in Persian education, judging from the standpoints of logical fitness, social evolution, contributions to after-ages, and the fate of empires.

CHAPTER V

EDUCATION OF THE ANCIENT SHEMITES

THE SHEMITES

"In the Semitic spirit there appear two opposite elements, an irresistible tendency toward self-assertion ... and the most intense subjectivity, coupled with a wealth of dreamy emotionality, which often flames up into the loftiest enthusiasm." It is with these words that a great German, Doctor Schmidt, in his "History of Pedagogy," sums up the conspicuous qualities of the race, and at the same time furnishes the explanation of their contributions to civilization.

It was not until Turanian culture had attained to considerable heights in the regions of Sumer and Accad that semisavage Shemites from the Arabian desert came and took possession. After much fighting they became masters of all Mesopotamia. ^LTheir first fixed habitat was Chaldea. Here "they built themselves towns in the midst of the Sumerians and Accadians, gradually adopting their higher civilization, and with it their system of writing, their religious literature, and their gods, and finally combining into a great Chaldeo-Semitic kingdom, with its centre at Babil (Babylon). Later on, they spread northward from Chaldea and founded the powerful empire of Assyria, with its centre first at Ashur, later at Nineveh. From about 2000 B. C. to 606 B. C., Assyria was the more powerful state, extending its sway over the whole of western Asia, but after the latter date Babylonia once more rose to eminence, only to succumb in less than a century to the Persian Empire of Cyrus the Great, 538 B. C."* The same fate which overtook imperial Rome when she had conquered Greece overtook these empire-building Assyrio-Babylonians—they were conquered themselves. The priestly Turanian civilization into which they had come as masters at length mastered them.

ASSYRIO-BABYLONIAN EDUCATION

In accordance with the facts just stated, we may define their system as priestly education.

Ends in View.—There was only one great end in view, and that was education for the priest by the priest, but the priest was the scholar in other spheres as well as in his own, and this fact enlarged the curriculum very considerably.

Curriculum.—We know almost nothing about primary education in the Tigris-Euphrates valley, except that there must have been such a thing, preparing at least for the higher education of the priests. The range of subjects was strikingly wide, including reading, writing, arithmetic, astronomy, music, literature, philology, architecture, painting, sculpture, etc. In his superb summing up of the whole matter Doctor Davidson shows that most of these studies, together with others, were carried to surprising perfection.

Method.—Higher education was given in regular schools or colleges in connection with the temples and libraries. Their language, like that of Egypt, was ide-

^{*} Davidson's "History of Education," p. 50.

ographic. The writing process consisted of cuneiform or wedge-shaped impressions made upon soft clay tablets. The lessons in reading and writing must have taxed memory and patience to the utmost. Many tablets with school exercises on them have been found in Babylon. It is thought that such advances as the Assyrio-Babylonians made in astronomy must have required telescopes. The complete appropriation of Babylonian literature by the Assyrians was accomplished by the help of grammar and lexicons, or dictionaries.

Estimate.—Remnants of architecture, art, and literature in the great museums of the world speak eloquently of the power and luxury and culture to which the Assyrio-Babylonians attained. Their literature in particular, "consisting chiefly of epic and lyric poetry of a religious character, was marked by sublimity, and must have exerted a powerful influence." Unhappily, however, sin was not considered as something wrong in itself, but rather as an offense against some unseen avenging power. In this way craven fear rather than moral freedom became the ethical motive. The results were, of course, disastrous, not only to the Assyrio-Babylonians but to early Europe, where these false impressions were carried.

REFERENCES

- I. Myers' "General History."
- 2. Graves' "History of Education Before the Middle Ages."
- 3. Davidson's "History of Education."

QUESTIONS

I. Who were the ancient Shemites? What conspicuous race qualities help to explain their contributions to civilization?

2. What was the origin of the Babylonians and Assyrians? Explain the course of empire.

3. To what extent did the Shemites succumb to the civilization of the conquered Turanians?

4. What, therefore, became the one great purpose of Assyrio-Babylonian education?

5. Account for the extensive curriculum of this priestly system. If possible, study Davidson's masterly summing up.

6. Explain the educational methods of the Assyrio-Babylonians pretty fully.

7. What were the contributions of Assyrio-Babylonian education to material civilization? Why was their moral ideal so serious?

CHAPTER VI

EDUCATION OF THE ANCIENT HEBREWS

THE HEBREWS

The Phœnicians and Hebrews were of the same Shemitic stock as the Assyrio-Babylonians, both nations beginning in Shemitic migrations from the neighborhood of Babylon. The Phœnicians had already made that coast of the Mediterranean Sea which faces the Lebanon Mountains their habitat when Abraham arrived in the twenty-third century B. C. Their commercial and colonial history is well known, and could have been achieved only by a people of intelligence and indomitable energy; but apart from the fact that they gave the world the science of navigation and a phonetic alphabet, they have contributed nothing for which we owe them praise. On the contrary, the immorality of their ideals is abhorrent, and accounts not only for . their fate at the hands of Rome, but also for their race oblivion.

The Hebrews, however, as we shall see, deserve our profoundest thought, and serve as a perpetual moral type for all the world. They are the descendants of Abraham, a Shemite from "Ur of the Chaldees," who, by divine injunction, migrated with his family to Canaan, now called Palestine, about 2300 B. C.

In Egypt.—After a brief nomadic sojourn in Canaan, his people as a whole sought a new habitat in the fertile land of Egypt. This was in the time of his grandson Jacob, to whom and his sons a Hyksos king, also a Semite, assigned the pastureland of Goshen, where they flourished and were happy. After the expulsion of the Hyksos, a Hamite king, "who knew not Joseph," reduced the Hebrews to slavery. From this slavery God delivered his people by the hand of Moses, his servant. The stirring events of the exodus, or departure from Egypt, are familiar history. The exodus was the real beginning of nationality under theocracy for the chosen people. A period of forty years, destined to be passed in the wilderness, as means to ends in the religious and moral development of the social whole, punctuated by numerous moral crises of sin and grace, was ushered in by the institution of a priesthood in the person of Aaron, the brother of Moses, and by the Mosaic giving of the "Law." A new and hardier race emerged from the hardships and the lessons of the wilderness. Finally, after many tests of faith this unique people, led by Joshua, was permitted to reoccupy the "promised land," about thirteen or fourteen hundred years before Christ.

In the Promised Land.—This "promised land" was partitioned into twelve tribal provinces, to correspond with the number of the patriarch Jacob's sons. The threatening attitude of the Philistines, only partially conquered, taken in connection with their common relation to the true God, should have suggested the closest possible federation, but frequent dissensions defeated this end, and exposed the tribes separately to their powerful enemies. Under these circumstances local chiefs, or judges, raised up by God himself, sometimes attained to considerable intertribal recognition, but the conviction that only monarchy could

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save them from conquest by the Philistines grew and grew until at last, about 1095 B. C., the chosen people begged God through Judge Samuel to grant them a king, and God gave them Saul.

Kings .- King Saul, a Benjamite, was of giant stature and a born warrior, who soon reduced chaos to order. A strong feeling of nationality now began to take possession of the tribes. Through the "prophets," organized by Samuel into "schools," theocracy maintained the ascendancy over nationality for more than a century. When death deprived the king of Samuel's guidance, Saul gradually degenerated, and was succeeded, after a reign of forty years, by David, a Judahite. This warrior and poet did much during his reign of forty years that made for permanency of religious and political conditions. His brilliant son Solomon, also reigning forty years, produced a "golden age," but succumbed to the fatal seduction of commercial and political foreign relations. The accession of his weak and insolent son Rehoboam in 930 B. C., caused the ten northern tribes to revolt. Thus arose the separate kingdom of "Israel," with Samaria as the capital. The tribes of Judah and Benjamin remained loyal to the house of David, with Jerusalem as the capital.

Exile.—This defection in nationality was a blow to the ideal of theocracy and eventually caused the downfall of both kingdoms. The "ten tribes" were carried away in 720 B. C., by the Assyrians, and became "the ten lost tribes." In 586 B. C. the Babylonians stormed Jerusalem, destroyed the temple, and carried the people away captive into Babylon. The captivity was a wonderful discipline. It taught this remnant of the chosen people the importance of returning to God. Such spiritual return became possible through a code of traditional rulings written down in the reign of Josiah, and called *Thorah*. In 536 B. C., as a fulfilment of prophecy, it is believed, Cyrus the Great, conqueror of Babylon, allowed the Jews, as they began to be called, to return to Jerusalem.

Restoration.—Perhaps this restoration of the chosen people was to be their last grand opportunity to perfect an ideal theocracy. Be that as it may, Ezra and Nehemiah produced another golden age. It was in this period that the scribes (Scripture scholars) composed the voluminous commentary on "Moses and the Prophets," known as the Talmud, a body of moral and religious prescription. But the sun of Jewish glory was soon to set again, the voice of prophecy was stilled, and the race settled into a moral stupor from which even the peril of subjugation by contending worldempires could not wake it. In 323 B. C., after Alexander's death, his general, Ptolemy, made the Holy Land a province of Macedonia. The Syrians were the next masters. The Maccabees (142-64 B. C.) set up a brief independency, but all-conquering Rome finally made Judea a province, and after a series of insurrections Jerusalem was captured and the temple destroyed by Titus in the year 70 A. D. Since then the chosen people have been the "wandering Jews," a race without a home-an empire without a capital-destroyed, they still live! Taken in connection with the commission which called the nation into being, the unique nomadism to which the preceding pages call our attention, can mean only one thing, namely, that the Jew is a national envoy extraordinary of the true God.

Religion.—"In this people we have the worship of the one spiritual God—Jehovah—the purely One. With other Eastern nations, the primary and fundamental existence was nature; but that, with the Hebrews, becomes a mere creature, and spirit is foremost. God is the creator of nature and of all men, the only first cause of all things. God was honored, and could be honored only by righteousness, the reward of which was to be happiness "here and hereafter." *

The Old Testament is the embodiment of this religion by "Moses and the prophets," and by singers and historians. Taken in connection with the Talmud as a commentary, a commentary in which the law and the prophets were all too frequently brought to no effect by the traditions of the scribes and Pharisees, as Jesus tells us, the Old Testament constitutes the Jewish literature *par excellence*. Out of its truth, and its fulfilment in Christ, grew the New Testament. Apart from a knowledge of these Holy Scriptures, the great Jewish historian Josephus would become unintelligible.

JEWISH EDUCATION

The course of history, together with the religion to which attention has been called, prepares us to understand Jewish education as a system of means to ends.

Ends in View.—The primary purpose in Jewish education, as we are now prepared to see, was to produce a God-serving, moral race of men. God's chosen people were therefore required to know the true God in order that they might serve him intelligently, lov-

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* Sanderson's "World History and Its Makers," p. 56.

ingly, and freely. To this triple end the means were selected with great fitness.

Family.—There were no such things as formal schools before the restoration from Babylonian exile. Up to that time the home was held responsible for the primary education of Jewish boys and girls. The father, as we read in Holy Writ, was required to teach reading and writing. Reading, because it was a key to the Holy Scriptures, was the subject which above all others served the purposes of Jewish education. Singing was a favorite subject. The boys had to learn arithmetic and a trade, and the girls were trained in domestic service.

Festivals.—Three great yearly festivals of the Jews were an integral part of their educational system. These were held at Jerusalem, and every male Jew was required to attend. The feast of Passover rehearsed the thrilling story of the deliverance from Egyptian bondage; the feast of Pentecost, the majestic giving of the "Law" in the wilderness; and the feast of Tabernacles rehearsed the gracious favors of God providing food and protection for his children on the way to the promised land. These dramatic recitals kept alive the memory of God's dealing with the fathers and thus inflamed the hearts of the children with the same abiding love that prompted them to serve God willingly.

Schools of the Prophets.—King Saul's great adviser, Samuel, organized what are known as "the schools of the prophets." These schools were something like the modern institutes and religious summer schools. The sessions were movable, convenience and other matters dictating the selection of localities. Here inspired men of God convened for a season to improve themselves by mutual instruction in religion, lyrics, etc., in order that they in turn might carry God's messages down to the people. This higher educational movement continued for five centuries, bringing inestimable good to religion and the nation. Even kings, like David, as we see by effects on his psalms, were patrons of these schools. Academies of high rank sprang up afterward, as in Gamaliel's time.

Post-Exile Schools.—Provisions for higher education were made shortly after the return from Babylon, and in connection with the synagogues which Ezra founded. Henceforth the scribes, rather than the prophets, became the educational leaders, and the curriculum was very much enlarged, including philosophy. literature, science, and presently Greek.

It was not until several centuries before Christ that primary schools in the common meaning of that term became the custom. Their function was to supplement, not to displace, home training, and to prepare for higher education. The subjects already included in the family schooling were very much enriched, the poor and the rich alike were admitted, and the scribes as teachers employed methods that command modern respect. These instructors recognized and respected the individuality of the pupil, and applied with considerable skill what to-day we call the doctrine of correlation of sense-impressions. Strange to say, corporal punishment was not administered to pupils over eleven years of age.

Estimate.—The Jewish system of education, as was to be expected, was a most admirable selection of means to ends. It is true that the introduction of monarchy was somewhat inconsistent with theocracy as an educational ideal, but, in effect, the kings were God's representatives, and whenever the interests of the nation as a social whole or the moral freedom of the individual were seriously threatened by these representatives, they were openly denounced by the prophets of God, or repudiated and rejected, as in Saul's case.

The Jewish system of theocratic morality was immeasurably superior to pagan morality, where superstition too commonly stifled conscience, the voice of God within, and where fear of external force too commonly destroyed freedom. As a social whole the "chosen people" probably never attained to this high ideal, but that was due to the taint of long contact with the magism of Egypt and frequent contact with the same corrupting thing even in the promised land. To make matters worse, the well-meaning but mistaken zeal of the scribes and Pharisees, the accredited and responsible teachers of morals, too often had the same vitiating results.

It is also true that science as such was not an integral part of the theocratic curriculum, that with the exception of music, art as such and physical culture had no place at all in the system, and that literature was almost exclusively religious; but there were high and holy reasons for these apparent defects in curriculum. The chief reason, and the one implied in all others, was the necessity of institutional defense against the idolatry latent in the Semitic stock, and constantly pressed upon the chosen people from without.

The developed pedagogy of the Jews, as already indicated, is surprising, and must be regarded as a distinct contribution, pointing, as it does, to serious pursuit along the same lines.

REFERENCES

I. Myers' "General History."

- 2. Sanderson's "World History and Its Makers."
- 3. Lord's "Beacon Lights of History."
- 4. Monroe's "Cyclopedia of Education."
- 5. Graves' "History of Education Before the Middle Ages."
- 6. Davidson's "History of Education."

QUESTIONS

r. Who were the Phœnicians? Describe their educational ideal and the specific contributions of these ancients.

2. Who are the Hebrews, or Jews? Describe the unique course of their national development in Egypt, in the Wilderness, in the promised land, under kings, in exile, in their restoration to the Holy Land, and in their world-dispersion.

3. Compare the religion of the Jews with that of other Oriental nations. What was its effect on literature?

4. What, in accord with their religion, and as manifest in their unique national development, was the primary purpose of education among the ancient Jews?

5. Explain the educational function of the ancient Jewish family, going into the details of curriculum and methods.

6. Describe the great Jewish festivals and explain their educational function.

7. Describe the origin, curriculum, and pedagogy of the schools of the prophets.

8. What provisions for higher education were made after the return from Babylonian captivity? Go into the details of curriculum and pedagogy.

9. Describe the post-exile primary schools of the Jews, going into the details of curriculum and pedagogy.

10. Discuss the effect of monarchy on the theocratic ideal of education.

11. Compare the Jewish theocratic ideal of morality with that of pagan systems, and account for the historical miscarriage.

12. Account for the apparently defective curriculum of Jewish education.

13. What was the character of the later pedagogy of the Jews? Was it a distinct contribution to modern education?

CHAPTER VII

EDUCATION OF THE ANCIENT GREEKS

THE GREEKS

In very ancient times a Turanian people, later called Pelasgians, who had not wholly lost the original religious ideas of their earliest forebears, occupied the country afterward known as Greece.* At a time near the dawn of history they were conquered in part and driven into mountain regions or desert places by a number of tribes of Semites, who brought with them the supernaturalism of their race in religion, and became a sort of tribal empire under the Pelopids. This brings us down to about 1100 B. C., the reputed time of the Trojan war. By that time Aryans from the steppes of eastern Russia and Thessalv, kin to the Hindus and Persians in Asia, had become somewhat allied with the admixture of Turanian Semites. The Trojan war, in which it appears they sided with their Asiatic kin, weakened them, and the Aryans, later known as Hellenes, taking advantage of this weakness, and reinforced by their kinsmen from the north, conquered them. In time, the Hellenes, coming into close association with the conquered Turano-Semitic people, adopted much of their higher civilization, but imposed upon it their own Aryan individualism, into which they gradually merged completely. Centuries were passing, and the Hellenes,

* Davidson's, "History of Education," p. 88.

now (800-700 B. C.) settled more and more firmly in valleys separated by mountains, became separated into many tribes—the city-states of history—chief among them the war-loving Dorians and the beautyloving Ionians. This tribal separateness produced tribal wars and tribal competitions in the Aryan individualisms of the race that have never ceased to astonish and command the thinking world.

The Dorians, making Sparta the centre of a social whole, including many allied tribes, and the Ionians, making Athens the centre of another social whole which included many allied tribes, became bitter rivals for supremacy.

Then (492-479 B. C.) came the Persian wars, which threatened to engulf Greek individualism in Oriental despotism. Athens and Sparta, recognizing the common peril, forgot their rivalry and, fighting side by side at Marathon, Thermopylæ, and Salamis, bravely saved freedom.

In order to liberate the Greeks of Asia Minor and adjoining islands, the far-seeing Themistocles organized an Ionian league, the famous confederacy of Delos, with Athens at the head. Sparta was excluded from this confederacy, and Athens became immensely rich through the assessments apportioned among the members of the league. The great Athenian statesman, Pericles, in spite of protests, used the wealth of Athens to increase her strength and enhance her glory. Under his patronage Athens became the "seat of learning," and a "city beautiful." Then it was that builders and sculptors and painters vied with each other to create forever inimitable specimens of art. And it was then that letters and science and philosophy attained to a richness of production never surpassed by any people. It was the golden age of Athens (445-431 B. C.).*

But the glory of Athens came to a premature end. Her ambition had overreached itself. Sparta, resenting the course which events had taken, and moved by race bias, determined to crush her proud rival. And thus came the fratricidal Peloponnesian War (431-404B. C.). The great Pericles, perishing in the siege of Athens, with which the war began, left no one great enough to save Athens. Her fall in 404 B. C. was a blow from which she never fully recovered. Sparta had become supreme.

It is true enough that Thebes, under the inspiration of Epaminondas and Pelopidas, destroyed this supremacy in 371 B. C., but Thebes and Athens combined could not save Greek freedom. Philip of Macedon destroyed it at Chæronea, 338 B. C. Under Roman patronage Athens regained her intellectual supremacy, but lost it through the Ptolemies at Alexandria.

Religion.—The individualism of the Greeks, to which special attention has been called, accounts for the intellectual, emotional, and moral character of Greek religion. The freedom-loving Greek with whom we have to do in his wars and supremacies becomes the beauty-loving and self-expressive Greek in religion. With this conception mastered, we shall be ready to understand and appreciate Greek life and Greek education as a system of means and ends.

Gods.—The beauty of nature that "wrapped him round about" intoxicated his senses and entranced his mind. His lively imagination came to the rescue of reason and created lovely gods in human shape. This

* See Myers' "General History" for details.

attempt to express religious conceptions and emotions in human forms really amounts to self-worship, with nothing beyond it except the greater than human perfection which the Greek, though not always, attributed to his gods.* Among the great gods were Zeus (the Roman Jupiter), god of the air; Hera (the Roman Juno), the queen of Zeus; Apollo, the sungod; Poseidon (the Roman Neptune), the sea-god; Ares (the Roman Mars), god of war-and so on, almost without end. Athena (the Roman Minerva), goddess of wisdom; Aphrodite (the Roman Venus), goddess of love, and others show how the Greek mind deified in a poetic, artistic way all human perfections. The nine muses (Euterpe, Calliope, Terpsichore, etc.) deify human talents. The Greek world was literally crowded with minor deities. The lively Greek imagination deified almost every manifestation of beauty in nature. The flying clouds became Centaurs, humanheaded horses; the earthquakes were the work of Cyclops, Vulcan's blacksmiths; Conscience became the Furies; the beautiful seasons became three Graces (beautiful maidens); life and death were controlled by Fates, etc. The nature materials of this elaborate polytheism are intimately dependent on early Semitic influence, as the Semitic names employed and a careful study of Homer's characters clearly show. The distinctively Aryan thing in this nature-worship is the beauty-loving, self-expression.[†]

No Future State.—Early contact with European Turanians left in the Aryan Greek some vague belief in a future state of rewards and punishments, as we see

* Lord's "Ancient Religions."

† Davidson's "History of Education," p. 87.

in such gods as Hades, Proserpina, Castor, etc. A careful study of Greek poetry and art reveals no serious recognition of immortality. It is only when we come to the later speculations of the philosophers, as in Socrates, that we find this idea.

Morality.—The absence of the idea of immortality —no heaven, no hell, no god that cares much—robs Greek religion of all its value as a moral motive, and accounts for the moral superficiality of Greek civilization. The Greek prayed to his gods as we do to the true God, but he prayed for favors wanted now—not hereafter. When his self-made gods became quite real to the Greek imagination he would even pray for help in trouble.

Oracles.—This was the origin of the Greek oracles, as at Delphi and Dodona, where temples were erected to Apollo and Zeus respectively, and where priests were stationed, who should interpret and declare the will of the gods.

The Greek temples, like the statues of the gods within, were "dreams" of beauty, and as such they were veritable acts of worship. Everything that art could accomplish by architecture, sculpture, and painting, was done to perfect these temples.

The Greek priests were not a hereditary caste, as among the Hindus or in Egypt. They were appointed officials. This was probably due to the fact that the Asiatic forebears of these Aryan Greeks had never become subject to Semitic domination. And yet the influence of these priests, politically and otherwise, incredible as it may seem, especially in the case of the oracle at Delphi, was one time all but worldwide. Sacred Games.—The lively Greek imagination which created the gods endowed them with so much reality that worship in the form of beautiful temples was not enough. Sacred games—religious festivals, were therefore instituted as another mode of worship. In their final form these games consisted of contests, physical and mental, for which prizes were offered, thus to stimulate perfections which would please the gods.

The Olympian festival, held on the plain of Olympia, not far from Sparta, was instituted 776 B. C., and occurred every four years. The prizes offered promoted physical culture throughout Greece so much that the Greek body l ecame the ideal of the sculptors. The other festivals—the Pythian to Apollo, the Isthmian to Poseidon, and the Nemean to Zeus, offered prizes to poets, orators, historians, etc., thus promoting every variety of beautiful self-expression, which, we repeat, was the highest Greek ideal.

OLD GREEK EDUCATION

Justice to special features of Greek education before the age of Pericles calls for treatment under three heads, namely, the age of Homer, Sparta, and Athens.

Age of Homer.—The Hellenic tribes who had overcome the Turano-Semitic population of Homeric Greece, adopted the civilization of the conquered people almost bodily, as a careful study of Homer's Iliad and the Odyssey prove. From these sources we know that the Hellenic education of that period was patriarchal—the father taught his son to worship the gods and to serve the tribal state in war, while the mother, supervised the education of her daughter, teaching her religion and the life of a soldier's wife. The morals of boys and girls were carefully guarded. Books and schools had not yet come to Greece—life itself was education both in purpose and as means. The freedom-loving, beauty-worshipping, and self-expressive individualism of later history was present, but the hero and his wife were the sole object of this beauty-worship.

SPARTA

Tradition would have it that the Dorians had made the Peloponnesus their tribal habitat long before the Trojan war, but that they had been exiled to the north. Their return, known as the Dorian Migration,* evidently constitutes the major part of the final triumph of Hellenism over Semitism in Greece.

Spartan Social System. — Finding the so-called Achæans—probably Pelasgians—in possession of their early home, the Dorians promptly ousted them. The new city which the Dorians now built—Sparta—became the centre of the social whole, and the Dorian conquerors became known as Spartans. The conquered Achæans, a farm folk, were allowed to live round about the city, and became known as the *Periæci*. The Spartan rulers taxed them, but allowed them no voice in government. Some of the conquered folk were reduced to slavery in the special sense of the word, and called *Helots*.

SPARTAN EDUCATION

There was one man among the Spartans who saw that the Spartan social system imperilled the per-

* Myers' "General History."

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STATE AGRMAL SCHOOL Manual (ATS and Nome Economic) Samta garbara, california petuity of Dorian supremacy. This man was the celebrated Lycurgus, about 800 B. C. In the constitution which he now drew up for the Spartans he accordingly embodied provisions for an educational system that should cover the situation. All these provisions had one special end in view.

Final Purpose.—In his provisions for Spartan education, Lycurgus, adopting almost bodily the Pelasgian culture to which the Greeks had fallen heir, but utterly at variance with the higher claims of Greek individualism, became an exponent of Oriental militarism. In other words, he would dedicate the individual—soul and body—to the good of the social whole. Every boy must accordingly be trained for war, and every girl must be trained almost like a boy.

Infancy.—The state took charge of the Spartan boy from birth. A council of elders inspected the child. If he was defective in any way he was exposed to die in some mountain glen, unless adopted by the Periœci or the Helots. If he was allowed to live he was committed to the charge of his mother up to the age of seven, when the state took formal charge of his education.

Physical Culture.—The Spartan boy was now housed with others in public quarters serving the same purpose as our modern barracks, and his boy-life supervised by state officials known as "boy-trainers." All the details of his body life were ordered according to the one end in view, namely, physical fitness for war. With this end in view, he was required to sleep on pallets of straw, or rushes plucked by the boy himself from the banks of the Eurotas. He was a "barefoot boy" all the year round, and after the age of twelve his simple dress consisted of a single garment. He was often required to go hungry, but encouraged at the same time to forage for food. If, however, he was caught in the process, he was beaten to encourage craftiness.

Spartan physical culture included a graded system of gymnastics, beginning with running, jumping, and playing ball, to which throwing the discus, hurling the javelin, and wrestling were added as the boy grew older. Occasionally the wrestling matches became combats, and the boys were actually encouraged to resort to biting, kicking, gouging, etc. The boys were also trained in "squad" work under boy-captains, to whom absolute obedience must be rendered. Inasmuch as the course in gymnastics was an open-air affair crowds of spectators were not uncommon, and this served as a powerful stimulus.

Morals.—The Spartan boy was required to obey orders under all sorts of difficult situations. As he grew older he had to learn the laws of Lycurgus, together with the religious and moral prescriptions of Homer. This tended to produce respect for the existing order of things. The Spartan cultivated a beautiful reverence for old age, so much so that it was "a pleasure to grow old in Sparta." Moderation, temperance, self-control in any shape was considered a cardinal virtue. Courage in danger, even to death, as in the case of Leonidas at Thermopylæ, was held up as the great ideal.

Lycurgus, believing that foreign commerce would destroy the morals of Sparta, reduced it to the minimum by requiring the Spartans to use "iron money," which foreigners were loath to accept.

Intellect.-Reading and writing hardly constituted a part of the Spartan curriculum, but that did not save the boy from thinking. According to the laws of Lycurgus, the Spartan boys were obliged to take their meals---if such they may be called---with the grown-up men, at public tables. Here the affairs of the state, together with religion and morals, were freely discussed by the men. The strictest attention was required on the part of the boys. Questions followed, and if any boy could not answer them correctly he was punished. It was expected, moreover, that the answers, like the questions, should be right to the point. All the rules of the public tables tended to produce mental alertness, nicety of judgment, quick perception of means to ends, etc., in short. a very practical sort of intellectual culture.

Music.—This term, as used among the Greeks, covers anything over which a "muse" presides, that is, letters, or literature in the widest sense, together with music in the special sense. The Spartans, however, looked with favor only on religious and war music. The former was often learned in connection with choral dances; the latter with war-dances and epic poetry. In these exercises the girls were sometimes allowed to join with the boys.

Spartan Women.—Although the Spartan girls were allowed to live at home, their education was, in most respects, like that of the boys. The curriculum included religion, morals, and home virtues, together with music and dancing, and a course in physical culture that ran into some coarseness but certain¹ served its purpose.

Estimate.—Spartan education tended to produce a powerful social whole, but it sacrificed the individual

to the state, and the mind to the body, and thus failed to contribute anything in science, art, or philosophy, to future ages. Through this arrest of development Greece would have reverted to barbarism, had Athens not saved her from this fate.

ATHENS

The Greek race—perhaps it would be better to say Greek individualism—is seen to the best advantage among the Ionians. With them—especially in Ionian Athens—beauty became deified, and the worship of beauty a religion. The beauty of nature furnished the lively imagination of the Greek with many gods, but the forms in which he created them were really daring attempts at self-expression. All his arts, including architecture, sculpture, painting, poetry, oratory, together with his sciences and philosophy, were simply additional forms of self-worship and self-expression.

Democracy.—The Ionian Greeks—and this is only another case of Greek individualism—were the first race to attempt democracy.

Their political history began, as among the Dorians, with tribal monarchy, a common Pelasgian heritage. The untainted Aryanism of the Ionians had, however, stood in the way of complete assimilation. The transition from monarchy to democracy is one of the most fascinating chapters in psychology. The archons who succeeded the mythical king Codrus represented an elective compromise with hereditary monarchy (1050 B. C.). The laws of Draco and Solon were successive stages in the delivery of the social whole from the elective archons, for these archons were really an aristocratic remnant of monarchy, and, recognized as such, they could not satisfy the longing of the social whole for complete democracy. The so-called "tyrants" of Athens were rather popular usurpers than real reversions to monarchy. They failed utterly when Hippias, son of Pisistratus, became a despot. In Cleisthenes' restoration of Solon's laws (507 B. C.) Ionian monarchy succumbed permanently to democracy.

This strong Ionian leaning toward democracy, allied with that other love, the love of beauty, constitutes the explanation of Athenian education as a system of means to end. The system dates back almost to the age of the mythical Cadmus and his Phœnician alphabet, and it reaches its climax in the golden age of Pericles.

ATHENIAN EDUCATION

Ionian education and Dorian education, as their common origin would lead us to think, were almost identical in outline, or curriculum, but the special ends in view enriched the common means and perfected them as special means.

Ideals.—The special end in view in Ionian, or Athenian education was, as we are now prepared to see, the perfect individual. This individual perfection included soul and body—the two perfectly related in strength and beauty. The physical perfection at which the true Athenian aimed would, of course, serve the purposes of war and thus the interests of the state, but the underlying concept was that perfection of the body had most intimate connection with perfection of the mind. And, with true Athenians, as already intimated, the perfect mind was a freedom-loving, beauty-worshipping, and self-expressive mind. It was this well-proportioned and symmetrical perfection, with all its implications, that was ever present and at work in curriculum and methods.

Home.—We feel the presence of this aim from the very beginning of an Athenian child's education—it began in play, *i. e.*, effort for the sake of pleasure free self-expression. Among his plays as among ours were leap-frog, rolling hoops, riding on a hobby-horse, etc., while the girls played with jacks, dolls, etc.

Childhood.—At the age of six the Athenian boynot the girl—began to go to school. And the whole boy—body and soul—were put to work. A trusted slave, called *pedagogue*, or boy-leader—a sort of physical and moral chaperon—accompanied the boy, watched over him, carried his writing materials and his lyre, and saved him from truancy.

Up to the age of fifteen the Athenian boy's school consisted of a teaching-place called *didascaleum*, and a place probably close by called the *palæstra*. Required by the state, primary education was nevertheless not supervised by the state. The teacher was, therefore, a private individual, who used his own house, or some rented room, for the school, and received his pay from the father of the boy.

Intellect.—Reading, writing, and counting, together with music, religion, and morals, constituted the curriculum for mental culture. By the addition of vowel letters the Greeks completed the Phœnician alphabet, to which they had fallen heir, into a much better educational means than the ideographs of Oriental systems. And yet reading was harder to learn than now because accents, punctuation, and word-separation had not been invented. "When the boy had learned his letters by tracing them in sand he was taught to copy verses and selections from well-known authors, at first upon wax-tablets with a stylus, and later on parchments with pen and ink." It was only in the later centuries that Athenian arithmetic amounted to more than counting. This was probably due to the fact that the Greek alphabet, with diacritical marks as a supplement, constituted the clumsy system of notation.

Morals.—It is a striking fact in Greece that the priest was not also the teacher as in Oriental nations. In spite of this fact the Greek mind included religion and morals in their perfection-producing curriculum. The Homeric poems became the Greek bible, and were used as means in religious and moral instruction. Suitable portions had to be recited and committed. In order to heighten the emotional effect, these selections were sung to the accompaniment of the lyre.

Music.—In the Athenian curriculum music served the ideal of human perfection in at least three ways by heightening the emotional effect, it reinforced religious and moral instruction, as just explained. Through the proper selection of epics and lyrics in the religious and moral instruction substitution of good for evil emotions, and therefore emotional purity was possible. The Greeks believed, as we believe, that because music urges soul and body into intimate relations it is the highest form of beautiful self-expression.

Physical Culture.—The fact that the school curriculum of Athens included a good deal of physical culture explains why the school-day was an all-day programme without injury to the boy's health. The

exercises were selected as means to ends in physical beauty—running and jumping, for example, were selected for symmetry, throwing the discus for general adjustment, hurling the javelin for poise, and dancing coupled with music for grace. The palæstra was carefully supervised as a preparation for higher courses.

Youth.—The education of an Athenian boy usually ended at the age of fifteen, except in the case of wealthy boys, or for leadership. This higher course in physical culture was prescribed by the state, and offered in state gymnasia located just outside the city. The course was called the *pentathlon*, meaning five exercises in physical strength. It consisted of a complex plan in running, jumping, throwing the discus, hurling the javelin, and wrestling. The last of them, as in Sparta, sometimes developed into real fights.

We look in vain for a corresponding higher course in mental culture. It was not until the golden age of Pericles had come that we hear of grammar, mathematics, and philosophy. Nevertheless, the Athenians correlated with this gymnasium course a course in mental culture that commands the attention of the twentieth century. The gymnasium did not demand all of the young man's time. He was then free to go where he pleased. This brought him much in contact with public men, moralists, etc. The golden age of Pericles added courts and theatres and orators and artists and writers and philosophers to the young man's educational opportunities.

Manhood.—At the age of eighteen the Athenian boy was admitted into probationary citizenship. This was the beginning of a two years' course in military training. Apprenticeship in arms for a year in the city garrison was followed after examination by a year of frontier service. At the age of twenty he took the Solonian oath of citizenship, and was merged into the common life of Athens, a democracy of freemen from the highest rights of which, alas, four times as many boys were excluded by the tragedy of slavery.

Athenian Women.—The Athenian system of education made almost no provisions for women. The home and life as she found them in Athens—with almost as little personal freedom as the slave—were the Athenian woman's only educational opportunities. And when, in the golden age, Athenian women tried to steal an education, they were looked upon with suspicion.

Estimate.—Individual perfection, with due respect for the social whole, is probably the highest end in view in education, but the Athenian failed to perfect such an individuality because his religion could not supply the final moral guarantees.

It was partly due to this religious and moral failure that Athens debased her educational ideal by the inferior place allotted to woman, and by her system of slavery, for through both of these failures Athenian individualism denied the rights of the social whole.

The unerring selection of fundamentals in curriculum and methods as means to ends has scarcely been surpassed by the educational experts of the twentieth century.

Christianity, offering the largest possible freedom to individuality, with an equal promise of democracy to nations small and great, this correlate freedom leading to the highest possible progress in true science, was "the one thing needful" on the way to "the one far-off divine event" for which the world was waiting. The Jewish system was the bridge which Providence and psychology, if we mistake not, built across the great chasm.

THE NEW EDUCATION

The Græco-Persian War brought Greece—especially Athens—into the world-stream. The new ideas which came to the city through foreign commerce and foreign connections of every sort, together with the great fact that Pericles made Athens a seat of learning, induced Greek individualism to run wild. Faith in gods created by imagination gave way to doubt and then to despair. Rebellious individuality no longer recognized its obligations to the social whole, and Athens as a city-state was losing all coherence. This condition of things produced new teachers known as *Sophists*. It was their hope to adjust education to the new conditions.

SOPHISTS

The word sophist means wise teacher, or specialist in teaching. The Greek Sophists were usually learned, well-travelled non-Athenians who were attracted to the metropolis by the opportunities to teach. The "new age" was a great opportunity for young men who had talent for oratory and politics. The Sophists, professing great proficiency in matters of this sort, were therefore in much demand at Athens especially among young men of gymnasium age. These young men attached themselves to the new teachers and their new ideas with adolescent heroworship. Special stress was laid on argument. Debatable subjects in politics, ethics, etc., were used as means to ends. In the debating process truth was often sacrificed to words, for the laws of thought had not yet been formulated, and specious rhetoric—flights of oratory—could seduce the heart and cheat the head. There were able and noble Sophists, such as Protagoras, a favorite of Socrates, and when they, with "new Athens," which indeed they helped to create, had tasted the vanity of outward beauty and propriety, they turned to inward beauty, or truth, and thus paved the way for philosophy.

The conservatives were bitterly and justly offended. They saw the need of new and better moral guarantees, and therefore the need of a new and better curriculum, and would no doubt have welcomed an effective reconciliation between the failing claims of the Athenian social whole, or state, and the riotous claims of the new Athenian individuality. But, to begin with, the Sophists, defying all tradition, accepted pay for teaching! And then, if we may touch the climax of things at once, they repudiated the study of theology and science. Protagoras, their best representative, expressed this repudiation as follows: "As to the gods, we know not," and "Man (individual man) is the measure of things." It is no wonder therefore that thoughtful men were shocked and offended. It is true that the Greek mind had tried to find "the solution of things" as early as the stimulating century of Cleisthenes, just before the Persian War. This, for example, was the case with Pythagoras, but an explanation of the world to the correction of which the Sophists addressed themselves was far more difficult, and therefore probably far more attractive. The attempt produced such truth-seekers, or *Philosophers*, as Socrates, Plato, Aristotle, and others.

FYTHAGORAS

Pythagoras, the great forerunner of Greek philosophers, was born on the island of Samos, 580 B. C., and died about 500 B. C. He was fortunate in his teachers. Among them were the honored sages Thales and Anaximander. Then, too, it was possible for him to travel extensively. It is said that he went as far east as India. In Egypt, as the historian Grote tells us, he became profoundly impressed with the secret doctrines of God and immortality, to which as an inner circle some of the priests adhered. In view of the fine training and his exceptional association with the profoundest thinkers of other lands, it is not surprising that Pythagoras believed he had found the solution of the world's woes in holy harmony.

At Crotona.—In order to embody his ideal in a select social whole and thus to demonstrate its efficiency as a world-remedy, he established a school at Crotona, a Greek city in southern Italy. It is not known just why he preferred Crotona for his experiment, but perhaps he wanted to get away from the beaten path, and knew that the colonial city could furnish him with young men more suited to his purposes. The brotherhood of disciples into which Pythagoras organized his school was a secret society subject to strict ascetic rule. The "perfect life"—made so by the harmony which he would teach them—was the end in view. He was therefore careful to receive into the school only young men of marked ability and good morals. The Crotona curriculum included all studies that explained harmony or made for harmony. Thus, mathematics was studied as an explanation of the "harmony of the spheres," music was studied for soul-rhythm, ethics for moral harmony, philosophy for harmony with God, etc. The unique pedagogy of Pythagoras deserves attention. He graded his instructions into two courses, the exoteric, or preparatory course, which lasted three years, and the esoteric, or deeper course. He would not appear face to face before his students in the exoteric course, but addressed them from behind a curtain. This method was based on the belief that his scholarship was a sufficient appeal to younger men, that it was enough for them if he said it. Thus arose among his disciples the celebrated "ipse dixit" which settled any argument. He associated very intimately with his "initiated" disciples. To them he spoke face to face, relying powerfully on his personality. He had found the two great qualifications of the professional teacher, but his divorce of the two was a forced pedagogy, to say the very least.

What became of his house and of Pythagoras personally is not exactly known, but when at length this learned brotherhood, "masters of all the sciences known," and who therefore looked upon themselves as an intellectual and moral aristocracy, became tangled deeply in politics, its members were driven as fugitives into all parts of Italy and Greece. It continued to exist for some three centuries a deep and abiding influence.

SOCRATES

It would be hard to find another celebrated man who has been as ungraciously maligned* by his critics

* Sanderson's "World History and Its Makers."

and as gratuitously idealized as Socrates. This, with motives that we cannot always appreciate, has happened because both his critics and his worshippers have been able to make his contemporary biographers —his own disciples—say opposite things. Unprejudiced comparison of his biographers, especially Plato and Xenophon, probably fixes the truth just between the conclusions of his critics and his worshippers.

In the Making.-Socrates was born in Athens 469 B. C., and died there 399 B. C. His father was a sculptor-perhaps what we should consider a stonecutter-and the boy followed his father's occupation. As son of an Athenian citizen, he must have received the usual education of the palæstra and the didiscaleum, and even if-as may have been the casehe found himself unable to take advantage of the gymnasium and the higher mental opportunities to which youths of that period had access, he grew to manhood in the best period of the golden age. A boy of his known mental caliber would find "life itself" in such an age an educational opportunity of the highest order. The sobering effect of life as a heavyarmed soldier in the Peloponnesian War must have helped powerfully to shape his well-known moral conceptions. Some authorities believe that his conception of God as a supreme being, almost in our sense of the word, and his belief in immortality, were due to contact with the teachings of Pythagoras. In outward appearance, as all his biographers agree, Socrates was conspicuously and notoriously ugly, as even Xantippe must have recognized when, unhappily for her and himself, she accepted him as spouse, but in soul he was beautiful and true and good, seeking after God and immortality.

Services.-The Sophists, in the language of their best representative, Protagoras, had assumed that "Man (individual man) is the measure of all things," thus making each man a law to himself in thinking and morals. There could not then-if this assumption proved correct—be any truths except individual conclusions, and there could not then be any laws of character. The world was still "a world of chance." Socrates-and this gives us a true view of the great thinker himself-challenged the assumption of Protagoras. He said "Man (the genus man) is the measure of things." In other words, we can "measure things"-understand the universe in all its manifold relations-by induction. Whether applied to psychology and ethics, as in the specific uses which Socrates made of the method, or to nature and mathematics, this is our modern "laboratory method." Socrates had thus given to true philosophy its highest goal and pointed out the way. In his practical application of the inductive method-and this is his special claim on us here-Socrates employed two modes of teaching. Accosting some man in the market-place or on the street, or wherever the busy world of Athens offered him a chance, he would suddenly ask some one a question, and then another, and another, until the last replies flatly contradicted first replies. This was his favorite method with the Sophists, whose pretensions he would thus purposely expose to ridicule, and it is known as Socratic irony. It leaves a sting, and should therefore be only sparingly used to-day, if at all. With earnest inquirers he used a somewhat different method-the true inductive method of inquiry. It is known as the Maieutic, or

developing method. In this, the "true" Socratic method, he would employ a series of questions that required the learner to think "facts" for himself, and then by laboratory collocation the class truths or "definitions" to which such facts lead up. This method was in startling harmony with modern "apperception," and the skill with which he used it gives Socrates a high place among the princely teachers of all ages.

The method has its limitations, as in the teaching of facts that the learner cannot think for himself, and as when used to "quibble" or cover ignorance in the teacher, and it may lead to serious failure. The use which Socrates made of it too frequently himself, coupling it with hateful irony, in the end cost him his life.

PLATO

The three best-known disciples of Socrates were Plato, Xenophon, and Alcibiades.*

In the Making.—Plato's real name was Aristocles. The surname Plato may mean broad-browed or broadshouldered. He was born at Athens 427 B. C., and died there 347 B. C. He could trace his descent from Solon and away back to Codrus. To this aristocracy of birth his family added that of wealth, and Plato

* The last one, by a course of life that shamed even voluptuous Athens, helped to bring great discredit on the moral influence of Socrates. Xenophon, on the contrary, reflects great honor on his teacher through three charming books: the "Anabasis," the "Memorabilia," and the "Cyropedia." In the second of these books Xenophon is his teacher's biographer. The "Cyropedia," as we now know, was an Athenian exile's attempt to recommend the best features of the Spartan system to Athens under the literary pretense of recommending the best features of Persian education to Sparta.

therefore had every opportunity to acquire the culture which the golden age afforded him. Endowed with gifts of body and mind, he became conspicuously proficient in "gymnastics," literary culture including "music," and in "letters," including the arts and sciences. "The fermentation and stir of adolescence" tempted him to express himself in poetry. At the age of twenty he first came under the magic touch of Socrates. The young man, moved by the power of the new touch, and by a serious comparison of his works with Homer, destroyed most of his poems-thousands of them-and turned seriously to philosophy. From this time forward for ten years-until the teacher's death-Plato, greatly encouraged by Socrates, was his most promising pupil. His studious life in this period was somewhat like that of a conscientious and ambitious college boy of the twentieth century. After the death of his great teacher "he gathered up his effects and went on a lengthy journey from Athens." * His visits included Egypt, where, as in the case of Pythagoras, he may have drunk deeply at the fountain of learned priests. After his return to Athens he visited Sicily three times, and perhaps the great Pythagoras. Whatever else may have helped to make Plato, he was pre-eminently the disciple of Socrates, and as such a seeker after "the measure of things"-a philosopher—an idealist of the noblest order.

The Academy.—At length, about forty years of age, he began his life-work at Athens. The busy marketplace had no charm for this cultured man. A little way from the city was a quiet grove, the "Akademia." Here it was that Plato, like Pythagoras, lectured to a

* "World History and Its Makers."

very select body of disciples on life, the future state God, immortality, and responsibility.

The "Republic."—We know to-day—sucn are the conclusions of psychology—that the feelings or emotions are the springs of action, and that when emotion amounts to passion, a knowledge of what is right or best is not always a sufficient guarantee of right action, or virtue. But Plato, like Socrates before him, failed to take account of these relations, and therefore concluded that "knowledge is virtue." In other words, they both held that as soon as any one really knows what is absolutely right and best he will do without fail what is right and best.

But Plato, unlike his great master, held that only the few can ever hope to think the concepts, or "ideas," of which such knowledge must consist. Therefore, as a solution of the strained relations between Greek individuality and the state as a social whole, he planned a system of education for the state by the state—a system that should make the future state a perfect state. It was to be a caste system to which the educational systems of Sparta and Athens should both contribute what was best.

As Plato saw things, the ideal state as a social whole must be composed of only three classes of individuals; namely, those who can serve her best in the "living" industries; those who can serve her best as soldiers for defense, and those who can serve her best as statesmen, or rulers. What each class needs is "education for efficiency, boys and girls alike." The "industrials" will have to consist of those people who have little capacity for higher things; the soldiers of those who have capacity for war and the courage it requires, and the rulers must consist only of those individuals who have special talent for philosophic wisdom.

This idea, state was to decide questions of marriage and the right of children to live. Every healthy boy and girl was to have as much education as Athens offered in the palæstra and the didiscaleum, "with some slight modifications of content." At the end of this period the least capable were to be "sifted out," or eliminated, by examinations. Those who stood the tests well enough were to continue their education in physical culture and military discipline until twenty, boys and girls alike. During this period the mind was not neglected for the body, for Plato saw, what we see to-day, that the courage of the best soldier is as much a matter of mind as of body. At twenty years of age a final selection determined who was to be the soldier and who the philosopher, or ruler. The education of the latter was to be continued for fifteen more years, special stress being laid on geometry, literature, or "music," and philosophy proper.

Estimate.—This proposed system was never accepted by Athens, and late in life Plato revised it in a book called "Laws." Plato believed that his system of elimination would provide the state with efficient service, and that such efficiency, based on special talent, served the highest interests of individual happiness. In theory this looks plausible enough, for even if the diagnosis upon which the state must rest her placements of the individual makes mistakes, the "misfits" would be far less numerous than usual. But the classification of individuals into only three classes was too narrow for Athens, and would be too narrow for any age. To make the matter worse, Plato's proposed system would not educate woman for herself as a woman, thus striking a fatal blow at an individuality that is of absolute importance to society.

ARISTOTLE

The fascinating biography of Aristotle, as any one can find for himself,* reads more like fiction than fiction itself.

In the Making.-He was born at Stagira, Macedonia, in 384 B. C., and died about 322 B. C. His father was court physician to Philip, King of Macedon, and put the boy into the hands of a teacher to whose precious memory Aristotle later erected a monument. The bright boy became an orphan at an early age, and after spending all his patrimony in a hurry, entered the army a mere boy. He soon tired of camps and barracks, and did not know what to make of himself. In his perplexity he consulted the oracle of Delphi, and was promptly told to go to Athens and study philosophy. Here, only eighteen years of age, small in stature, and not physically attractive, this learned physician's son became the eager disciple of Plato. He was a born student, precocious and intensely active. Plato called him the "intellect of his school." The world has long confirmed this judgment and honors him as "the Alexander of the intellectual world." He remained with Plato for twenty years, revering him in life and erecting to his memory a monument of love. The Academy lost its charm for Aristotle when the master died, and he continued his

* "World History and Its Makers," vol. IV.

studies for three years at the court of King Hermias, son of his own first tutor. King Hermias was conquered and killed. Aristotle now made the sister his wife and moved to lovely Mytelene. From here he was called by King Philip to be his son's tutor at the palace of Stagira. He was now ripe in years, learning, and experience, and his success as a tutor for four years was phenomenal.

The "Lyceum."—Presently, when fifty years of age, Aristotle, perhaps with some ambition to become the head of the Academy, returned to Athens. In the meantime, Alexander on his marches had put to death a friend of the great philosopher, and the resulting coldness of relations between the former teacher and his pupil probably kept Aristotle from becoming the head of the Academy. He therefore opened a school of his own in a suburban grove, called "Lyceum," after a fane of Apollo erected within. The subjects which he offered suggest and foreshadow the range of our universities. He specialized in physics, including mathematics, together with physiology, biology, politics, psychology, and philosophy proper, but was equally at home in the literature and fine arts of the golden age.

Aristotle, rather than the English Bacon, was the real father of induction, and thus giving the sciences not only content but form, he may well be called their "father." He was "quite a character," as we should say. Since nature had not gifted him with fine physique, he tried to make up for defects by strict attention to toilet and style. He lectured walking, his disciples walking with him in the garden. From this peculiarity his school and the disciples of his teaching have taken the name of Peripatetics. In the morning he lectured on subjects more or less abstruse to students who were ready; in the afternoon he selected subjects somewhat popular, and addressed himself to a larger circle of disciples.

The "Politics."—Aristotle gave the Greek world many books, and grew rich as a result, but many of them have been lost to the Western world. His treatise on the laws of thought, *i. e.*, logic, gave both the pagan and the Christian world a "deductive twist" for many centuries. The books that interest us more especially here are his "Morals" and his "Politics."

Aristotle was definitely modern in psychology. He understood the function of emotions as the springs of action, and therefore had no patience with the Socratic and Platonic doctrine that "Knowledge-per se-is Virtue." And he was still more impatient with the two underlying doctrines of Plato's "Republic," namely, that knowledge consists of self-existent concepts-ideas-universals-and that these concepts are possible for just a few, who should therefore control the state as a social whole. He saw, as we do, that knowledge consists of two kinds of ideas, namely, percepts and concepts, and that of the two only percepts stand for "reality"-that concepts have no selfexistence apart from the individual consciousness that thinks them by induction. Over against his revered master he was a "realist," not an "idealist."

With these points in mind, and moved by the desire to contribute something to the happiness of man, Aristotle made the last brave effort to reconcile the claims of Greek individuality with the claims of the state as a social whole. The result of this attempt was his book on "Politics." He accepted Plato's Spartan idea that education by the state should be best for the state, but insisted with all the power of his matchless logic on democracy instead of aristocracy in the state control of education. Accordingly he rejected absolutely and finally all caste systems in which the few —on the ground that they alone could attain to wisdom—should have a voice. Yielding to the limitations of his age, he also disapproved of education for the working classes. And realizing the difference of function in men and women as such, he rejected the kind of state education proposed by Plato, but gave the women nothing that really enriched their function. He recognized the educational function of the home, and paid tribute to its sacred relations.

Aristotle's educational psychology is strikingly modern. According to his analysis, physical culture and mental culture should be correlated, but the former should lead the latter through the early teens and the latter through the later teens. To the traditional course in reading, writing, letters, and art, Aristotle would add drawing. With him the beauty-worship of the Greek mind had rather gained than lost, nor did he forget the religious and moral function of literature, including music and the arts. He had no patience with physical culture that aimed at making only athletes and warriors, since "the former exhausts" and "the latter brutalizes." Not mere strength and beauty but self-control-self-restraint-were to be the aims. We cannot tell what curriculum Aristotle advocated for higher education, for his "Politics"probably by reason of sudden death-was never finished, but putting together "two and two" in his

practice and philosophy, we should say that he would emphasize mathematics, science, logic, politics.

Estimate .- Aristotle, like Plato, failed to impress himself seriously upon the age to which they give such splendor. The momentum which rebellious Greek individualism had acquired made it impossible. In later centuries pagan and Christian Europe became their slaves. Through the survival of his "Organ," or Laws of Thought, Aristotle, the father of induction, long enslaved the world to barren and deceptive syllogisms in religion and philosophy. The great things for which both Plato and Aristotle stand-their recognition that both society and the individual have just claims on each other, and that neither should jeopardize the claims of the other-their sincere search after truth in heaven and earth, for time and eternitythese things took fast hold of the world only by and by, but the hold is likely to be permanent, and only Christ has surpassed them in the great solutions.

GREEK AFTER-INSTITUTIONS

The educational movement inaugurated by the Greek Sophists culminated in Aristotle. "The voice of the prophets had ceased." There were, indeed, some after-movements, but the movers were rather interpreters and critics than contributors. For our purposes, all these after-movements can be briefly and conveniently summed up as schools of philosophy, schools of rhetoric, and universities.

Schools of Philosophy.—The urgent encouragement which Socrates gave his followers to think for themselves produced almost as many sects as there were individuals. (1) His disciple Antisthenes imposed upon himself the task of denouncing the alarming moral decay of the age. The fanatic fury into which this task urged him and his followers, so that for very blindness they could see no good in any one, made them snap and snarl at every one. It was this extreme pessimism that led the Greek world to call these moralists the "Cynics," or "Dog" philosophers. The most conspicuous of all the Cynics was Diogenes, who lived in a tub and went about with a lantern in broad day just to find "a man." (2) The "*Stoics*" were Cynics with the rough edges toned down. Zeno, their tall founder, had listened to the savage invectives of Cynic teachers for more than ten years-until his soul actually revolted-and then he founded a school of his own in Athens. His followers are called "Stoics" because he used a porch or colonnade (stoa) as a meeting-place. The Stoics were not moral pessimists. They held that virtue, or right moral action, was so important that even pain should be defied in doing right. The Roman Stoics went further-they gloried in pain themselves and inflicted it with fiendish glee on others. (3) Epicurus, searching after happiness, found it, like Zeno, in virtue, but did not put himself purposely in the way of pain. A man of means, he yet lived a life of simple goodness and piety. He taught in his own house, and had an immense following in spite of scandals falsely circulated by his enemies. The followers of Epicurus are often confused with the followers of the wicked pleasure-seeker Aristippus, a disciple of Socrates, but of whom he never once approved. (4) The "Sceptics" or Inquirers, arose from the encouragement which philosophy gave to farreaching research. Finding themselves unable to explain everything, they rushed to the other foolish extreme of denying everything. Pyrrho himself, their founder, was merely a humble inquirer; his disciples of a later date were quite unworthy of the master. Schools of Rhetoric.—Just as the speculative im-

Schools of Rhetoric.—Just as the speculative impulse given to Greek education by Socrates produced the philosophic schools, so the emphasis placed on public life by the Sophists produced a multitude of schools of rhetoric. Isocrates, a man of great consequence in the generation after Socrates, organized the work of the Sophists, and made his school a model for others. The success with which he prepared young men for the vigorous public life of the fourth century B. C. helped to make Athens the centre of the intellectual world for several more centuries.

The Universities .- The emphasis which the Sophists placed upon intellectual education to prepare for public life relegated the classical course of the older Athens more and more to the rear. After the loss of national independence at the hands of Philip of Macedon attendance upon the gymnasium became wholly voluntary. In time compulsory attendance at the lectures of the schools of philosophy was combined with voluntary attendance at the schools of rhetoric. When at length the wars between Rome and Macedon came, "the Academy, the Lyceum, and the school of Epicurus, which had been without the walls, followed the Stoics into the city." State support and state control, including the selection of Sophists, or professors, became the custom. The University of Athens, thus fully organized, henceforth offered long courses of study, and the student life began to resemble the college life of modern

times. The University of Athens remained the stronghold of paganism after the advent of Christianity, but it declined rapidly when Constantine made Christianity the state religion, and Justinian suppressed it completely in 529 A. D.

In the meantime, as the result of Alexander's conquest, higher education began to spread all over the East. Greek universities arose at Rhodes, Tarsus, Alexandria, and elsewhere, but the impulse which the Ptolemies gave to education by founding the famous Alexandrian library, 280 B. C., for the collection of manuscripts, and the equally famous museum, for science research, made Alexandria the rival and finally the superior of Athens as a university centre. Here Hellenic culture and the Orient merged into speculative "isms" that have never ceased to attract the learned world. "Here the Hebrew Scriptures were translated into Greek (the Septuagint), 250 B. C.; here Philo the Jew attempted to harmonize the Hebrew Scriptures with Greek philosophy." Here Euclid worked at geometry, Archimedes in physics, and Eratosthenes in geography and astronomy. Here grammar, literature, and rhetoric grew into shape, and here Greek philosophy was finally worsted by Christianity.

REFERENCES

- 1. Myers' "General History."
- 2. "World History and Its Makers," vols. I and IV.
- 3. Lord's "Old Pagan Civilizations."
- 4. Davidson's "History of Education."
- 5. Graves' "History of Education," vol. I.
- 6. Mahaffy's "Old Greek Education."
- 7. Monroe's "Cyclopedia of Education."
- 8. De Quincey's "Plato's Republic."
- 9. Hegel's "Philosophy of Education."
- 10. Walden's "The Universities of Ancient Greece."

QUESTIONS

r. Give an account of the tribal migrations out of which the Hellenes or Greeks presently emerged triumphant and of the origin of Hellenic tribes.

2. What was the peril to which the Persian War exposed Greek development? Explain the course of events and the issue.

3. Sketch briefly the golden age of Athens, her terrible fall, and the end of Greek independence.

4. Show that the same individualism present in Greek wars and supremacies was the dominating thing in Greek religion.

5. Give an account of the Greek gods and the weak moral guarantees of Greek ideas about the "future state."

6. Discuss the Greek oracles, together with the temples and priests.

7. Describe the sacred games of the Greeks, and show how they served as a means in the development of the Greeks.

8. Account for the character of education in the Homeric age.

9. What was the origin of Sparta? For what social system does this origin account? How did Lycurgus organize Sparta for her destiny?

10. Explain the detailed fitness of means and ends in the Lycurgian scheme of Spartan education. Judge the system in detail.

11. Greek individualism is seen to the best advantage in Ionian Athens. The story of transition from monarchy to democracy is conspicuously the story of individualism. Tell this story.

12. What were the distinctive ideals of Athenian education?

13. Explain the system of means and ends in Athenian education, going into full details. Judge the system by its results to history and in the light of psychology, sociology, etc.

14. Account for the distinction between the "new" and the "old" in Greek education.

15. Who were the Greek Sophists? What produced them? Describe their work of "adjustment" in detail and explain why the conservatives opposed the Sophists.

16. Account for the rise of Greek philosophy.

17. How may we account for the high purpose of Pythagoras and for the impress which he left on education?

18. Describe his work at Crotona, going into the details of curriculum and method. Judge his pedagogy by modern standards.

19. What can you find in the making of Socrates to help us account for his ideas and for the force which he gave his ideas?

20. Explain the philosophic position of Socrates over against that of Protagoras.

21. Distinguish the methods by which Socrates hoped to make men think for themselves, and choose between them.

22. Whom do we usually associate most intimately with Socrates in the list of his disciples? What did Xenophon contribute to education?

23. Use "the making of Plato" to account as fully as possible for the loftiness of his ideals and for the immortal force which he gave these ideals.

24. Describe the services which Plato rendered the cause of education through his "Academy" and his "Republic."

25. Examine the fitness of means to ends as set forth in Plato's "Republic."

26. Why can the twentieth century not accept Plato's "Republic" outright?

27. To what extent do the influences which helped to make Aristotle account for the views which he held and for the place which he holds to-day?

28. Explain the services which Aristotle rendered the cause of education through his "Lyceum" and his books. Compare his "Politics" with Plato's "Republic." Estimate the worth of Aristotle in the light of modern standards.

29. Account for the philosophical schools, the later schools of rhetoric, and the Greek universities. Examine them, going into the details.

CHAPTER VIII

EDUCATION OF THE ANCIENT ROMANS

ROME

The "Latins" of Alba Longa, who founded Rome 753 B. C., if tradition holds, were Aryans, like the Greeks, and a part of the same great migration. But the Etruscans, whose presence north of the Tiber induced the Latins to found Rome, were, if we mistake not, identical with the Pelasgians noticed in Chapter VII, and therefore a Turano-Semitic people. The conquest of the Etruscan Veii (396 B. C.) by the Latins was the beginning of Aryan supremacy; but the usual amalgamation of stocks produced the compositeness of Roman ideals and Roman history as known to later centuries. "The Turanians contributed the bulk of the religious notions and rites; the Semites the prosaic practicality and thirst for power; the Aryans, with their language, their political forms."*

Ambition.—The origin of Rome, and the perils to which hostile neighbors afterward exposed her very existence, soon produced the co-operative ambition which finally gave her a world-empire. The first task to which this co-operative ambition of composite Rome applied herself was the conquest of all Italy. This task had been all but accomplished when Pyrrhus, cousin of Alexander the Great, had been forced to

^{*} Davidson's "History of Education," p. 107.

abandon Tarentum, the heart of Magna Græcia (272 B. C.). But Rome, now master of Italy, coveted the supremacy to which Phœnician Carthage had attained on sea, and thus came the three Punic wars, stretching over more than a century, Rome finally conquering Carthage (146 B. C.). In the meantime ambitious Rome had conquered almost all the lands that touch the sea, including not only northern Africa but parts of Spain, Asia Minor, and Greece.

During all these centuries, reaching from 509 B. C. to 146 B. C., Roman ambition had not ceased to be co-operative, and Rome had continued to be a republic, but out of the wars and turmoils that followed the conquests for a century emerged the fateful Triumvirates. Another step—and co-operative ambition had succumbed to personal ambition—the republic was dead—empire was born. The story of the twelve Cæsars and their successors, together with the gradual decay and final fall of Rome (476 A. D.), is too well known to require repetition.

Individuality.—The co-operative ambition of Rome grew out of the common peril to which both patrician and plebeian were exposed, and gave rise first to the Laws of the Twelve Tables (451 B. C.) and later to the Laws of Licinius (367 B. C.). While, therefore, in Rome as in Sparta, war became the business of the state, the Roman state as a social whole saved herself —and individuality—from caste limitations, and honored all human relations that served both the individual and the state. This reconciliation between the Roman social whole and individuality explains the well-known reverence for home ties and useful occupations. Thus the "sense" of justice for which Greek individuality kept striving was concretely realized in Roman life. While, as a consequence, the Roman people as a whole were sedate, serious, and self-controlled, they were also proud and satisfied. "To be a Roman was to be greater than a king."

Religion .- "The prosaic practicality and thirst for power"-the Semitic trait so conspicuous in Roman ambition and Roman vocations-appears as a utilitarian, or practical, tendency in their religion. For, although the Romans, as we should expect, held fundamentally to the same nature-worship as their Greek cousins, they did not clothe their gods in beautiful human shapes, and worship them in joyous play, but rather felt their presence as moral forces with whom serious bargains must be made, and to whom placating sacrifices must be offered. This feeling is seen especially in the reverence paid to the household "Lares and Penates," and the guardian "Vestal Virgins." To the former, which typified family unity, frequent sacrifices were made by the father at shrines within the home itself; and to the latter, which typified the larger family, or state, the Vestal Virgins as state guardians sacrificed at public shrines or temples.* Originally the king was the chief priest, and the pontifex maximus of the republic was a civil functionary.

The more serious and dignified aspect of Roman religion held fast even when conquering Rome in her new intellectualism and æsthetic hunger took the Greek gods bodily into her heart. It was only when Rome in her later general decay made place in her "Pantheon" for the gods of all nations that religion lost its power as a moral sanction.

* Graves' "History of Education," vol. I, p. 240.

Although in the course of events, therefore, Rome had adopted Greek religion, and with it its expressive architecture, literature, and philosophy, she failed to contribute much to these adoptions—except in law and oratory—because she enslaved them all to ends of utility.

EDUCATION OF THE ROMANS

The course of political events, as briefly outlined above, together with the social and religious phases that accompanied this course of events, prepares us for the details of Roman education. These details can be gathered up most conveniently under two heads, namely, the "old" and the "new" education.

THE OLD EDUCATION

¹ The first, or old, period in Roman education extends from her earliest history to the time when Rome became completely infiltrated with Greek ideals. Roughly speaking, this did not occur before 146 B. C., when Rome finally conquered Greece, and was astonished into captivation by the wealth of art which conquering armies poured into her lap; but the dividingline in point of time is only a text-book convenience, for after all the amalgamation of old and new ideals had begun as early as the conquest of Magna Græcia, and was not complete before the age of Augustus.

Old Ideals.—The primary purpose of early Roman education evidently was *military and industrial efficiency*, conserved by reverence for the gods and reverence for necessary laws. In other words, what Rome needed and wanted was good soldiers, good citizens, good industrials. These efficiencies placed the emphasis upon such qualities as strength, patriotic courage, reverence for Roman laws and institutions, capacity for doing things that must be done, and gravity of mind and mien. Underlying and supporting all requirements was respectful piety. The Laws of the Twelve Tables was the first constitutional embodiment of Roman ideals.

The Home.—The fundamental educational agency upon which Rome relied was the home. The parents held themselves responsible to the state for the bringing up of boys and girls in strict accord with ideals. In theory the father's authority was absolute, extending even to possible divorce, infanticide, slavery, and other despotic treatment, but in practice the Roman wife and mother became more than her husband's rival in influence. The Roman home tie, like that of the Jews, was a religious institution, and the Roman father was not an exile, as he was among the Spartans. And yet, because he was needed much on the fields and in the camp, or, if a patrician, in the forum, the mother who, as in the case of Cornelia, loved her children, became an important factor in their early education. She shared with her husband the task of teaching religion and morals, and also the simple lessons in reading, writing, and the number calculations of the daily life. The old Roman family, in short, worshipped the gods of the home and crops and war, teaching the children the meaning of the sacred rites and ceremonies by example and by precept. To these religious instructions, training in obedience, frugality, industry, and military courage was added for the boys, while the girls became their mother's second self in domestic life.*

* Monroe's "Cyclopedia of Education."

Beyond the Home.—Besides the home, the early Romans used "life itself" as means to ends in education. The boys learned such vocations as farming and business from fathers and elders.

(1) The patrician's son could gather much from close association with the father in the "forum," where the father met and dealt with his "clients," or dependents. After Roman tradition and Roman aspirations had taken written form in the Laws of the Twelve Tables (451 B. C.) they were hung in the forum and had to be committed by the boys. It appears highly probable, however, that there were schools near the forum very early in the history of the Roman republic, and that in these schools the Laws of the Twelve Tables, as well as reading and writing, were well-recognized parts of the curriculum.

(2) The early Romans, always looking forward to the possibilities of war with hostile neighbors, paid much attention to the body. Outdoor life for boys, agriculture and allied vocations, served the purposes in part, but above and beyond all incidental means was training in the use of arms, which must always have been obligatory on the Roman youth.

THE NEW EDUCATION

Rome first came in contact with Greek culture in the early days of the republic, if not before the republic, and a steady infiltration of the new ideas was inevitable. It was not, however, till about the middle of the third century (230 B. C.) that regular schools were opened. The oldest schoolmaster known to us was Spurius Carvilius. He and his fellows, however, were at a great disadvantage for want of schoolbooks, there being no such thing as an available Roman literature. In a short time this deficiency was supplied by the rise of a literature imitated from the Greek, the works of Nævius, Livius Andronicus, Ennius, Pacuvius, and Plautus. The Latin version of the "Odyssey" (250 B. C.) by the second of these now became for the Romans what the Homeric poems generally had long been for the Greeks. At the same time the knowledge of the Greek language became more and more an accomplishment of the upper classes, being imparted by slave tutors. When at last, in 146 B. C., Greece became a Roman province, "captive Greece took captive her rude conqueror." *

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Cato .- There was much opposition on the part of conservatives. Men like the elder Cato would not make any compromise with Greek innovations. We are told that because he feared the corrupting influx of Greek ideas, he supervised the education of his boy with special care. Not content that the learned slave tutor whom he had employed for his son should beat a free-born boy, or that a Roman boy should owe his education to a Greek, he taught the boy himself. "This sturdy Roman," as Plutarch calls him, taught his son to read, "wrote histories, in large characters, with his own hand, so that his son, without stirring out of the house, might learn to know about his countrymen and forefathers," "taught him his grammar, law, and gymnastics." "Nor did he only show him how to throw a dart, to fight in armor, and to ride, but to box also, and to endure both heat and cold,

* Davidson's "History of Education," p. 109.

and to swim over the most rapid and roughest rivers." *

Horace.—But sturdy Cato and his fellows failed to stem the tide, as we see in the education of the poet Horace. In his sixth satire Horace tells us that his father, not satisfied with anything but the best, refused to send the boy to school to Flavius, the schoolmaster of Venusia, the poet's birthplace, but carried him to Rome, where the Græco-Roman education had already acquired much perfection, and "where the sons of the centurions, the great men there, used to go, with their bags and slates on the left arm, taking the teacher's fee on the ides of eight months in the year." This description of little Horace going to school gives us a glimpse not only into a "new" school world, but a neat little summing up of school details in Augustan Rome.

New Ideals.—As soon as Rome had become mistress of Italy, and still more in the later days of the republic when, through the Punic wars and after-wars, she had gained world-power, but especially when through the great triumvirates the republic succumbed to empire, the old ideal of military and industrial efficiency gave way to the new ideal of Greek culture for the enriched patricians. What Rome now needed most was not great armies and conquering leaders but great statesmen who should shape the policy of empire. Law and oratory, together with philosophy, thus became the means to the ends in view. The "old" industries, including agriculture, became the function of slaves and subject classes, and thus in time completely subordinate in the new ideal. The new system of means to

* Painter's "History of Education," p. 80.

ends may be conveniently treated under three or four conspicuous heads, namely, elementary schools, grammar-schools, schools of rhetoric and philosophy, or, as we should say, elementary schools, high schools, and universities.

Elementary Schools.—Apart from Livy's account* of the seizure of Virginia on her way to school, and the reference of Dionysius to the same event, we have no proof that elementary schools existed in Rome before the period of Hellenization. The Romans called the elementary school *ludus* (play), probably because it was merely added to the home as a sort of play.

There were no school buildings such as we have in mind to-day. The school was held in hired rooms, porches, and other open spaces. It was only in the best centuries of the republic that the school was comfortably housed and the place properly equipped and beautified.

The Roman children of the new era began to go to school at the age of six or seven. In imitation of the Greeks, a slave called *pedagogue* or *custos* accompanied the boy all day, and a *nurse* the girl. This slave was often a Greek from whom the children might learn to speak, and who should act as a sort of moral chaperon, but the function of the Roman pedagogue was probably always of less importance than in Greece.

Reading, writing, and arithmetic, if these had not been learned at home, from tutors, were the first subjects studied. The literary curriculum embraced stories of heroes, ballads, the Laws of the Twelve Tables, and later suitable selections from the translation of the "Odyssey" by Andronicus.

* Book III, p. 44.

The teacher was called the *literator* (teacher of letters). He was usually a Greek or Syro-Greek freedman, without much special training, and accordingly without social standing. Though required by the state, he was not employed nor supervised by it.

The alphabetic method, as Quintilian tells us, was used in teaching reading. Writing was taught on wax tablets, with the stylus, the teacher guiding the pupil's hand at first. When the letters had been mastered written work was combined with the literary works of the curriculum. An *abacus* was used in connection with the fingers in teaching counting. The Roman notation made written calculations very difficult. Sums were worked on wax tablets. Chanting was combined with religious and moral instructions. The memoriter methods of the school made corporal punishment a special feature. In the fresco of Herculaneum is pictured a flogging scene. The victim is mounted on a comrade's back, his feet held by another, while the master beats him on the bare back.

The school day began early in the morning and lasted all day, with only a brief intermission for luncheon. But there were frequent holidays and a long summer vacation.

Grammar-Schools.—The new era produced grammar, or secondary, schools before the close of the third century B. C. They were high schools, somewhat like the grammar-schools of American colonial times, preparing ambitious boys for the schools of rhetoric. At first the Roman grammar-school was a Greek school, in charge of a Greek teacher, called the *grammaticus*, or *literatus*, who planned the curriculum. Latin grammarschools began to arise about a century B. C. The curriculum, which was pretty uniform, consisted primarily of grammar and literature. The authors most used at first were Homer and Hesiod, but later also Vergil and Horace. The explanation of these authors by the teacher was made through such useful adjuncts as mythology, history, geography, astronomy, geometry, and music.

Although the grammaticus was not a state employee, he was usually well qualified for his work, and therefore so well paid that when he had a large school he could house it not only comfortably but with suitable equipment and the beautifying arts.

The boys who could afford to attend a grammarschool usually entered at the age of twelve, and remained about three years. Nevertheless, they were not always happy in their school life, for while the methods of work were better, the necessary mechanical grind, which often ran into foolish trifling, as Seneca tells us, led to frequent and cruel punishments.

Schools of Rhetoric.—During the second century B. C. schools of rhetoric, that is, schools of public speaking, or oratory, began to be imported from Greece to Rome, and this in spite of decrees and edicts to the contrary. Neither Greek nor Latin schools of rhetoric, therefore, were at all common before the Augustan age, and they were patronized chiefly by those ambitious young men who hoped to become orators and statesmen.

The curriculum offered commands twentieth-century attention, both for its fitness of means to ends and for the underlying conception of the dignity of Roman statesmanship. "Besides a knowledge of the technic of oratory, they furnished a linguistic, literary, and scientific education of broad scope, and even a training in philosophy, especially Stoicism. Thus they covered all the subjects later included under the seven liberal arts—grammar, rhetoric, dialectic, music, arithmetic, geometry, and astronomy, although, as would be expected, these studies were given something of a practical turn."* The ambitious young men who took this course began the work at about the age of sixteen, when they assumed the garb of manhood, or *toga virilis*, and finished it in two or three years, according to ability.

The Universities.—In the Augustan age private teachers of philosophy became common, and ambitious graduates from the schools of rhetoric might, like Cicero, go to the university of Athens, Alexandria, or Rhodes. Presently, in the first century A. D., when universities, the result of Greek impulse, sprang up everywhere, Rome herself became a centre. The University of Rome sprang up "from a library founded by Vespasian in the Temple of Peace about 75 A. D., and a half-century later, through the addition of professors and a splendid building, Hadrian organized it into the *Athenœum*. Here at first courses in liberal arts, especially in grammar and rhetoric, were given; and somewhat later, professional work in law, medicine, architecture, and mechanics was added."[†]

Estimate.—(I) As a system of means to ends the "old" education of Rome really produced the military and industrial efficiency comporting with her ambition for world-empire without enslaving individuality, and thus combined what was best in Sparta and Athens, but gave it a higher trend by making the

* Graves' "History of Education," vol. I, p. 261. † Graves.

useful rather than the merely beautiful the thing most worth while.

(2) Although this education continued to be a private rather than a public trust, and thus suffered the usual defects of non-professional supervision, it emphasized the educational function of the home and "life itself," points well in line with the highest ideals of the twentieth century.*

(3) The "new" education, more cultural than the old, subsidized this culture to the useful, and thus narrowed opportunity to the few most closely identified with state fortunes—an aristocracy rather than a democracy.

(4) While the new education, for the sake of aristocracy, ambitiously appropriated the whole range of Hellenic curriculum, pedagogy, as we gather from the criticism of representatives like Cicero, Seneca, Quintilian, and Plutarch, lagged far behind the best psychology.

(5) Even if the Roman woman of the better class was generally required to have an elementary education, and was not excluded from the higher opportunities of the new education, she was subject to "convention," and usually obtained such education from hired tutors in her private home, or from her more fortunate husband.

(6) It is true that imperial Rome, especially in her decay, subsidized education, through salaried teachers and through all sorts of privileges, thus robbing at least higher education of serious content and purpose, very much as Prussian Hohenzollernism, by accepting sixteenth-century Protestantism, deprived the latter of

* The Rockefeller Foundation ideals.

its initial democratizing element; but the one outstanding fact, and the fact that describes the special mission of Rome in education, is the world-wide transmission of the new education which her genius for organization made possible, and her enrichment of the same by laws which are still foundations. Add to this, that by nationalizing Christianity, Constantine the Great yoked this transmission with its final master and redeemer, and then we have a record of achievement of which Rome may well be proud.

ROMAN REPRESENTATIVES

Rome never produced Platos and Aristotles who could think new philosophies, but in her age of glory and decay she did produce great orators and statesmen, who were at the same time interpreters and reformers of the system which produced them, and true disciples of philosophy. Such, for example, were Cicero, Seneca, Quintilian, and others.

CICERO

"Cicero was born 106 B. C., in Arpinum, the birthplace also of Marius. His father was a knight of good social position and the son was well educated in preparation for the bar and for public life." He assumed the *toga virilis* at sixteen, and studied law, oratory, and philosophy. Afterward he travelled in Greece and Asia Minor to improve his education. He studied oratory at Rhodes. Here his teacher, Apollonius, a celebrated rhetorician, once requested him to deliver a Greek declamation. The audience was delighted,

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and, after a sorrowful silence, Apollonius said: "You have my praise and admiration, Cicero, and Greece my pity and commiseration, since those arts and that eloquence, which are the only glories that remain to her, will now be transferred to Rome."

Apollonius prophesied correctly, for it was through Cicero and his distinguished services that Rome really did become a very centre of oratory. In his treatise on oratory he lays great stress on morals as the distinguishing quality of a true orator. True to Roman utilitarianism, he believed the republic needed the service of such good men, and therefore, as means to ends, he advocated a comprehensive course in history, literature, and philosophy, in addition to law, in the training of an orator. The wisdom of this advice has never been controverted. Had the fate of Rome been committed to orators, or statesmen, of such a type, empire might never have followed on the heel of the republic. It was this preference for character as the highest thing in education that led him to oppose the brutal corporal punishments which disgraced Roman education, and he saw, as we now see, that the curriculum which he proposed would reduce its need to a minimum.

SENECA

Seneca was born at Cordova, Spain, in 4 B. C. His father was a distinguished Spanish rhetorician, who gave his son a liberal Roman education. Seneca became a successful orator and attained to high political honors under the Emperor Claudius. On account of an alleged connection with a royal plot, he was exiled to the island of Corsica, where he spent eight long years, but found consolation in philosophy. Later, recalled to Rome, he was honored with the office of pretor and that of consul, and acquired a vast fortune. The empress selected him as her confidential adviser and intrusted him with the education of her son, the future Nero.

He was probably the most eminent Latin writer of his age. He was a Stoic philosopher, and his books have been called Stoic sermons. He touches on education with a master's hand. Like Cicero before him, he believed that character is not only better than learning but that it is the greatest thing in education. He had a profound conception of the true God, and said that in building character "the will of man should be harmonized with the will of God." This formula, it is true, can be realized completely only when we know God's will in Christ, but it is no wonder that Seneca should be called "the Heathen seeker after God." His conception of the relation of religion to character, and the world's need of such character, convinced him, as it had Cicero, that curriculum and the teacher's personality rather than force should be the means to the end, and in this conclusion we moderns also believe.

QUINTILIAN

Quintilian was born about 35 A. D., or a little later, at Calagurris, Spain. The atmosphere of culture which Rome alone afforded drew him there early in life. Here, hoping to take up the profession of law, he pursued his studies under the special direction of his father, who himself was a celebrated rhetorician, and to whom he owed much of his future fame. He abandoned a successful practice in law to become a teacher of oratory. By this time oratory had acquired high reputation, and Vespasian, recognizing the eminent worth of Quintilian, granted him an allowance from the public treasury. He won the distinguishing title of "Professor of Eloquence," and Domitian, in appreciation of his splendid work, endowed him with consular rank. That this Roman professor of oratory was able to snatch supremacy from his Greek contemporaries and hold his place as a teacher, highly honored and highly endowed, for twenty years—difficult years for the empire—surely entitles him to a respectful hearing on the subject of Roman education.

He withdrew from public life at the early age of fifty-three, and devoted the rest of his life to his "Institutes of Oratory," a work in twelve volumes, in which, with the idea of outlining the education of an orator, he presented all after-ages with the most valuable treatise on education in general. This great work has long been considered the most valuable contribution of antiquity.

The educational views of Quintilian rest on the fundamental conception that the orator is "a good man skilled in speaking." He adds: "I say not only that he who would answer my idea of an orator must be a good man, but that no man unless he be good, can ever be an orator." With this end in view, and believing with Plato that wisdom is the way to goodness, Quintilian undertook to interpret the education of an orator from infancy to mature philosophy.

(1) A born psychologist, he saw, as the German Froebel saw much later, that education should begin in play—and that as early as possible. (2) Like Froebel, he recognized the child's imitating powers, and therefore advocated nurses, pedagogues, and teachers worthy of such imitation. As the child's associate, so the child in speech, and action.

(3) Like Froebel, he saw the children unfold more perfectly under the stimulating impulse of like associates, and therefore, although he was conscious of the possibilities of evil in the public schools, he advocated public schools as superior to the Roman tutors, still so common in his time.

(4) Believing with Cicero and Seneca and "a host of saints" that character-building should be the main purpose of education, he, like these, argued eloquently that not force (to which Roman custom still submitted) but the teacher's personality and the school curriculum are the means *par excellence*.

(5) And Quintilian, with all great educators from Socrates to Madame Montessori, believed in the sacredness of individuality, and therefore advocated earnestly, just as Froebel does, that "child-study" is the first and last and greatest task.

REFERENCES

- I. Myers' "General History."
- 2. Lord's "Old Pagan Civilizations."
- 3. Monroe's "Cyclopedia of Education."
- 4. Davidson's "History of Education."
- 5. Graves' "History of Education," vol. I.

QUESTIONS

r. Describe the origin of Rome and trace the resulting ambitious course of empire.

2. Trace the course of events in which the co-operative ambition of the Romans recognized Roman individuality.

3. How did the Greek nature-worship, which the Romans adopted, acquire its well-known utilitarianism, and what were the effects on Roman religion as a moral guarantee and as a motive in Roman contributions to after-ages?

4. What, in accord with her fundamental needs, were the educational ideals of "old" Rome, and upon what qualities of life did these ideals place the emphasis?

5. Explain the fitness of means to ends in the use which the "old" Romans made of the home and "life beyond the home" in their system of education.

6. Trace in detail the course of events in the transition from the "old" to the "new" in Roman education.

7. What was the attitude of the elder Cato and the father of Horace toward the influx of Greek ideas into Rome, and what did they do for their sons?

8. What, in accord with her "new" needs, were the ideals of the "new" education in Rome? How did these new ideals affect social classes?

9. Describe the elementary schools of "new" Rome, going into the details of curriculum, form, and methods. Do the same things with the grammar-schools, rhetorical schools, and universities.

10. What were the best and the worst things in the "old" and the "new" education of Rome?

11. Account fully for "the making" and services of Cicero, Seneca, and Quintilian.

PART II

CHRISTIAN EDUCATION

CHAPTER IX

CHRISTIAN EDUCATION

EARLY CHRISTIANITY

To recapitulate—conquered Greece was conquering her Roman conqueror, pouring out her culture far and wide, east and south and west, thus reproducing her "Greek self" in far-flung schools and universities. And Rome thus conquered by Greek intellect and beauty-love powerfully orientalized, was giving concrete form to abstract thought, and endowing with a blighting practicality all she was adopting.

It was into the midst of these events, and when the Maccabees had almost ceased in their patriotic struggles with Rome for Jewish nationality, that there was born in a remote corner of the world-empire, namely, in Bethlehem of Judea, the world's Messiah, Jesus Christ. And although the angels sang "Peace on earth, good-will to men," the great ones of the earth could not foresee that all who had gone before him had but groped in the dark, and that he alone brought light into the darkness, saved the gold from the dross, and set the world in quest of final ideals.

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CHRIST

In order to understand even to a limited degree the educational revolution which Christ's coming produced, and also in order that we may furnish ourselves with his world-conquering ideals, we would gladly here and now make him the subject of serious and sympathetic study.

In the Making.—The fact that Christ was born in the golden days of Rome, when Augustus Cæsar ruled the world, and at a time when God's chosen people had made large adjustments to their theocratic system of education in order to adapt it to postexile conditions (see chapter on Jewish education), helps us to understand at least the important human elements not to speak of his divinity—which entered into the making of the world's incomparable teacher.

Jesus was brought up at Nazareth, where Mary and Joseph came with him after their flight from Bethlehem to Egypt; and here, at the crossing-place of the nations, where commerce and military changes afforded much liberalizing familiarity with all the neighboring races, he lived with them up to the time of his ministry.

The first teachers of Jesus were Mary and Joseph, as all the connections show. It was at their knees that he must have learned to read the Scriptures.

"From the modest but priceless instructions of home," as Geikie says in his "Life of Christ," "Jesus would, doubtless, pass to school in the synagogue, where he would learn more of the law, and be taught to write, or rather, to print, for his writing would be in the old Hebrew characters—the only ones then in use." Even the "doctors" of Jerusalem, with whom, as we recall, he tarried for instructions on his first memorable journey with his parents to the Holy City, marvelled at his progress.

The great national festivals regularly held every year at Jerusalem, namely, those of the Passover, the Pentecost, and the Tabernacle, must have contributed powerfully to the education of a mind like that of Jesus.* Then, too, in July, October, January, and March, the Jewish community at Nazareth observed different events in the national history with more or less strictness, thus contributing not a little to the general effect.

In its quiet and divinely appointed security, the life of Jesus of Nazareth must have been a wonderful education in the book of nature. The gospels show most strikingly that nothing in his environment escaped the eye of Jesus. That he saw with unerring keenness all the life about him appears from the illustrations which he used in teaching. The painted lilies of the field, the sparrows on the wing, the shepherd's lost lamb-these and all the rest are his intimates. Nor does he fail to note the child at play, the toiler at his tasks, the beggar at the gate, the prince in his apparel, or the woman in her home-he sees and hears and knows them all. "He must have looked out on the world of men from the calm retreat of those years as he doubtless often did on the matchless landscape from the hills above the village. The strength and weakness of the systems of the day; the lights and shadows of the human world would be watched and noted with never-tiring survey, as were the hills and valleys, the clouds and sunshine of the scene around."

* Geikie's "Life of Christ," p. 144.

But, humanly speaking, the supreme influence in Jesus' own education was not the schooling of the synagogue, not the larger moulding of the yearly festivals, nor even his intimate contact with nature and life about him-the credit of this supreme influence must doubtless be given to the Holy Scriptures, which he, like Timothy, knew from a child. "In such a household as Joseph's we may be sure they were in daily use, for there, if anywhere, the rabbinical rule would be strictly observed, that three who eat together without talking of the law are as if they were eating (heathen) sacrifices." His profound knowledge of the Scriptures is evident to readers of the gospels. When, as he frequently did, he exposed the false teachers of his day, it was by direct appeal to these Scriptures, and even his enemies had to acknowledge him as a great teacher.

In the process of Christ's education, his human nature was evidently subject to "the same gradual development as in other men, such a development as, by its even and steadfast advance, made his life apparently in nothing different from that of his fellow townsmen, else they would not have felt the wonder at him which they afterward evinced. The laws and processes of ordinary human life must have been left to mould and form his manhood-the same habits of inquiry; the same need of collision of mind with mind." That his divine nature, never separable from the human, enriched the whole process, and thus helped to produce the transcendent results, we can hardly doubt. Only the issue itself, however, is absolutely plain, and that is that Jesus became the one incomparable teacher of all ages.

CHRIST'S GOSPEL FOR TEACHERS

It was largely because they had failed to solve the problems of human origin and human destiny-the two supreme questions of human reason-that the ancients failed so ignominiously in their educational systems as adjustments of the claims of the social whole and individuality. These claims simply could not be perfectly adjusted until the true relation of man to his maker, God, was rightly understood. What has just been stated also explains why even the wisest of the ancients, such as Socrates, Plato, and Aristotle, and all the eminent Oriental worthies who preceded them, except the Jewish representatives, contributed so little that still lives in their proposed educational schemes. We owe the perfect adjustment of all human relations to Christ, and him alone; for he alone taught us our true sonship with God the Father, and the moral stewardship of such sonship. The "chosen people" knew God as a person, the "maker of heaven and earth and all that in them is"; they no longer confused God the maker with nature the creature; but, under the law and the prophets, they had approached him as the God of justice and not also as a God of love.

Gospel for Teachers.—When Christ taught even the least and the last of his disciples to think of God as "Our Father," he really taught not only the fatherhood of God, but also the brotherhood of man, and the immortality of man. The last two are evident and inseparable deductions from the first, and have continued to be the fundamental motives in a series of educational revolutions that may not cease until time itself must cease. The immeasurable dignity and worth which these two Christian doctrines give to individuality illumines, as if in letters of gold, the function of education as adjustment to life itself—life now, and life hereafter.

Christian Ideal.—Henceforth the claims of God the Father must of course be primary, and those of the social whole and the individual, secondary. "Seek ye first the kingdom of God, and all these things shall be added." In this new adjustment the individual gains his freedom from the despotism to which he was subject among the ancients, and the social whole must gain that vast uplift which comes from the consciousness of sonship, brotherhood, and immortality, as these have been brought to light in Christ. The distinguishing obligations of Christian education may be conveniently considered under such heads as nationality, caste, slavery, women, and children.

Nationality.—In order that education may be really "Christian," it must recognize, as we have seen, the origin and consequent nobility of man as man; it must so relate the individual to the social whole as to make it possible for each to serve the highest interests of the other; and it must recognize the fact—most important of all—that as a child of God, endowed with moral faculty, each and every man is responsible to God, in time and eternity, for the life which he lives.

These ideals of Christian education call upon the state as the guardian of the commonwealth to provide education for all classes and conditions of men, to organize and supervise effectively all such forms of education as may tend to ameliorate and perfect the philanthropic, moral, and economic welfare of the social whole, and finally to encourage the church as the guardian of eternal interests to improve the morals of the social whole through religion.

Caste.—No such high ideals served as motives in the caste systems of the ancients. Their systems robbed countless multitudes of human beings of all educational opportunities, sacrificed the welfare of the many to the few, and, in this way as in other things, failed to satisfy the rightful claims of God. It is the glory of Christianity that it opens the door of the school to every boy and girl, thus bidding all alike, subject only to God's gifts and requirements, to qualify for life here and hereafter.

Slavery.—Slavery was the invariable concomitant of ancient caste systems. It took no account of the soul, except so far as intelligence and faithfulness would increase the value of service, and the body of the slave was the master's chattel, or worse than that. The slave could be bought, sold, bartered for another, punished, and killed, at the master's will. The feeling of infinite "distance" which "color" and "race" sometimes produce in us, was largely present. That in origin and destiny the master and slave were brothers had not occurred even to such philosophers as Plato and Aristotle. For the reasons just enumerated, the children of slaves, as a rule, except in later Greece and Rome, received no education. Degeneracy was the fatal result.

It was only when the slave and his master began to understand the Saviour's "Our Father," that the shackles began to fall, and that these humbled sons of God could not be deprived much longer of the privilege of education and the destiny of man as man. Women.—Woman occupied an inferior position among all the ancients, except perhaps among the Jews. In some countries, Persia for example, even the women of the higher castes were hardly better off than slaves. Only a few of the great philosophers, among them Plato, believed that women were equally capable of education with men. Those ancients who had attained to the concept of immortality appear to have denied this hope to woman.

The whole attitude of Jesus is opposed to this ancient treatment of woman. He makes her man's equal and honored helpmeet in all the spheres of life, and his redeemed coheir of life eternal. She is therefore entitled to all the privileges of education which fit her for her noble destiny. Only the Jewish women were mentally and institutionally ready for such "good news." It was long before the world-empire which Christ presently conquered could understand the message in full.

Children.—The ancients, as we here recall, failed to recognize the rights of childhood. Weaklings and cripples had but small chance to live. Infanticide, exposure, slavery, and other fates were not considered crimes against childhood. The great possibilities of primary education, apart from the home, were poorly understood, as we gather from the lack of provisions for the purpose, and from the expressed opinions of philosophers.

Jesus bade his disciples let the little ones come to him. Their very helplessness appealed to his love. He who "knew" what was in "man," and foresaw the possibilities of education for a little child, urged his followers to cherish them and to "bring them up in the fear of the Lord." The world into which the Saviour of little children came was not easily convinced that they are entitled to the privilege of special education. In this respect as in others, thinkers generally agreed with common practice. Quintilian, as we recall, was the notable exception. Perhaps—thanks to the Froebels and Montessoris—the world has become more nearly "Christian" in child education than in any other form.

Christ must be considered the world's incomparable teacher, not only because of the messages of hope that he brought, but also because of the methods which he used.

THE METHODS OF CHRIST

The "divine" in Christ combines with the "human" in his pedagogy. This, of course, is the only complete explanation of his teaching power, and in this coalition of his two natures we cannot hope to follow him completely, but perhaps we can follow the human in his methods with sufficient exactness to make him our great ideal. The human in Christ's method—from which, as just acknowledged, we can never wholly separate the divine—may be considered under such heads as his insight, sympathy, and skill.

Insight.—In order that we humans may know how to adapt means to ends in the teaching process, it is necessary for us to study the child. Perfect knowledge of the child, all other things being correlate, is the only final guarantee of perfect pedagogy. The most illustrious educational reformers whom the world has ever produced have, without exception, deplored our imperfect attainment to such knowledge. There may be locked doors and closed windows that will ever bar us from the presence chamber of the inmost soul of others, and who is there that knows, or can ever hope to know completely, even himself!

The Saviour of the world was not subject to such limitation. Of him of whom it is written that he was "Son of God" as well as "son of man," it is also written that "he knew what is in man," and needed not that any should testify of him. The most critical study of Christ's teaching process, including the wealth of his illustrative materials, confirms this judgment. In this respect, as in others, he was, as the German poet Herder says, "the realized ideal of humanity," toward which the teachers of all after-ages must press forward into greater nearness, even if his marvellous perfection can never be attained.

Sympathy.-It would be difficult to say offhand -perhaps we shall never know-whether the teaching process is more dependent upon sympathy or upon insight for complete success. There are some things bearing on this question that we know very well. Teachers who cannot feel what their pupils feel, and who do not care, cannot really know the children, and seldom work hard enough to win success as teachers. On the other hand, teachers who really like children, set out to ascertain and to do what is best. In such cases, the mastery of means to ends is joy. Sincere enthusiasm, tireless energy, and patient forbearance, together with other splendid prerequisites of success in teaching, are intimately bound up with sympathetic attitude. It was this sequential quality of sympathy with children that made such educational reformers as Pestalozzi and Froebel benefactors of the

human race. In other words, sympathy, in all such cases, transmutes insight into action.

Then, too, sympathy is contagious. It captivates and charms the child, who therefore lets down the bars of many otherwise closed doors, and opens many otherwise closed windows of his inmost self. It is this same quality that often makes the learner who is hard to understand an open book to his mother.

The divine-human sympathy of Christ makes him the unique fact of all history. Just as he, the world's Redeemer, "gave himself a ransom for many," so he gave himself to all whom he taught. He was the absolutely faithful friend. In his ministry there was room in the heart for the least and the last as well as for the greatest. The little ones whom he took up in his arms to bless, Mary at his feet choosing the better part, the multitudes on whom he had "compassion because they had no shepherd," Nicodemus, a ruler of the Jews—he gave himself to all alike, according to the measure of their needs.

And in the giving he became the attractive "One among ten thousand and altogether lovely" to his hearers, nor was there any sacrifice of dignity when he turned all distance into nearness. His hearers hung in reverent awe upon his words, ready for the message he would bring. This infinite sympathy of Christ, as well as the momentous fact that he "lived" what he taught, let it be reverently said, accounted very largely for the recognized propelling force of Christ's ideas. The great Napoleon must have felt this connection when he said: "Everything in Him amazes me. His spirit outreaches mine, and His will confounds me. Comparison is impossible between Him and any other being in the world. He is truly a being by Himself."

Skill .- The unique insight and sympathy of Christ as a teacher prepare us for a study of his incomparable skill. He drew his illustrations from nature and life in perfect conformity to the present and future needs of his hearers. Take for example the use which he made of "the sower that went forth to sow," the "figtree" on which the planter found no fruit, "the wind that bloweth where it listeth," or the use to which he put such parables as the "straight gate" and the "narrow way," "if God so clothe the grass," the "ninety and nine," etc. The apperceptive relation of means to ends in Christ's parables continues to evoke the highest praise of expert opinion. The unerring aptness of his illustrations, the suggestive wealth of implied inductions, and his emphasis on lessons worth while, must forever charm and delight those who learn at his feet. Even if we cannot hope to approach him, we can never be content unless we always try. In him who spake as no man ever spake, Karl Schmidt sees embodied all "the eternal principles of pedagogy."

CHRISTIANITY VS. PAGANISM

The new ideas which Christ brought into the world were so new and so revolutionary that they came into sharp collision with the old. This was largely true with respect to Judaism, in fulfilment of whose law and prophets Christ had come, but who could not or would not—recognize their promised king in him who had come; and it was specially true with respect to paganism, for the ultimate overthrow of which, with all its hideous perversions of God's kingdom, the Lord Christ had come.

A brief study of the various hindrances with which early Christianity and Christian education had to struggle will prepare us for the study of the actual progress of events in the great collision itself. Among these hindrances we must include the lowly ranks from which the earliest Christian converts were gathered, together with their poverty, ignorance, and weakness of number, and the persecutions to which the Roman emperors subjected them.

Poverty.—The lowly Nazarene selected as disciples Galilean fishermen and others from the common walks of life. The converts of Christianity, outside of Judea, consisted largely of common toilers, servants, and slaves. It goes without saying that they were usually poor. And to make matters worse, they would have no opportunity to acquire property, nor would it be permitted. If property-holders became converts, their property was confiscated, and they faced both persecution and death. Under such circumstances there was little hope for the education of their children.

Ignorance.—When it is considered that, in addition to their poverty, many of these early Christians, as can readily be imagined, were also usually illiterate and even ignorant, the desperateness of the case is apparent. In thousands of cases these early converts hardly themselves understood the new religion which they accepted simply because it offered "hope," and were consequently sorry teachers of their children. In spite of all such handicaps these early Christians found ways and means to make at least a start in the bringing up of children, whom they now were taught to regard as "gifts of God." Number.—At first, of course, the number of converts was too small and too scattered to establish schools of their own, even if their poverty and ignorance had not stood in the way. The only thing that was left for parents was to teach children what they could, or to send them to pagan schools for the rudiments of learning. Knowing the danger of the latter alternative, the early Christians, in order to be "separate from the world," tried hard to establish schools of their own as soon as their number and conditions made it possible. Of this we shall learn later on.

Books.—The fact that there were no Christian books made the process of education doubly hard for these early Christians, even when they found it possible to start schools of their own. Condemning pagan literature—for which of course there was reason enough —they had to be content with simple oral lessons on important topics of faith, together with the simple rites and duties of religion.

Emperors.—The Roman emperors, in the interest of politics, as we have seen, were usually ready enough to grant the gods of the conquered nations a place in the Pantheon, but there was no room there for Christ. The new value set on individuality and brotherhood and purity was so repugnant to haughty, vice-eaten imperial Rome, that persecution followed persecution.* The Christians, on account of the secret haunts to which they repaired for worship, were suspected of all sorts of crimes against the state, and this was an additional cause for persecution. Under all these cruel circumstances, the cause of Christian education suffered terribly, and yet, as we shall see, substantial progress was made almost from the beginning.

^{*} Myers' "General History."

OTHERWORLDLINESS

The most conspicuous motive in early Christianity was the almost universal belief in the nearness of the second advent of Christ. This ardent conviction placed the emphasis upon the moral and the future life -otherworldliness, as George Eliot calls it-instead of the earthly and present, which had so long been overemphasized in the pagan world. "There was," as Karl Schmidt so eloquently says, "a great withdrawal of man within himself, into that part of his nature which unites him to God, and that belongs not to the perishable, but to the imperishable; not to the visible, but to the invisible world. The supernatural laid hold of men's minds with a mighty energy. Man, as the son of heaven, became a stranger upon this earth, and esteemed the splendor of this world as of little value. The world in all its beauty had been tested by antiquity, and had not afforded the lasting peace promised of it. Heaven now took its place, and the citizen of heaven displaced in a measure the citizen of earth."

This world-disowning "asceticism" shaped Christian education from the very beginning, and continued to be the most powerful impulse all through the Middle Ages. We see it at work, as just noted, in the education which the earliest Christians gave their own children, and then in the catechumen schools, the catechetical schools, and the Church Fathers.

The Catechumen Schools.—As soon as it became possible, through increase of numbers and more favorable conditions generally, the Christians of the first century, in order to provide their children with the kind of education required by their otherworldliness, took measures to commit the task to men of special fitness. Thus arose the "catechumen schools," so called from a Greek word meaning to instruct orally, by asking questions and receiving answers, and then adding explanations and corrections. The teachers were accordingly called "catechists," and the pupils "catechumens." It was the purpose of these schools to prepare the catechumens, who gradually included prospective converts from Judaism and paganism as well as the children of believers, for church membership.

The course lasted anywhere from a few months, as in the beginning, to several years, as in later centuries. It included the Ten Commandments, the Lord's Prayer, the Apostles' Creed, and other articles of faith, together with simple psalmody. Sometimes the rudiments of reading and writing were added.

The catechist, appointed by the church, and selected on account of greater fitness, met his catechumens in the local church or in his private home for lesson hours several times a week or every day.

This system of religious and moral instruction became very general, and continued to be the practice after Christianity had vanquished paganism.

The Catechetical Schools.—The catechetical schools, properly so called, were catechumen schools of a higher order. It was their purpose to prepare teachers and leaders for the church, and to combat successfully all prejudice against the church among the great and learned.

The first of these catechetical schools—and the type of them all—arose at Alexandria,* the university town

^{*} It was here, as we recall, that a committee of seventy learned Jews had translated the Old Testament into Greek in order that the rising generation of Jews might be able to read it in the language now required. This translation is known as the "Septuagint."

of the Ptolemies, about the middle of the second century. Its founder was Athenagoras, so it is said, but it first came into prominence through Pantænus, a learned Stoic convert, as its head, 170 A. D. Alexandria* had early become the centre of Jewish Christianity, and when, in the course of time, this Christian community became numerous and strong enough* to open a synagogue or church, they connected therewith a school. The community, growing richer and larger, could not keep her promising young men from attending the lectures of the learned Greek but heathen university professors. Thus it came about that, in order to counteract the danger of such contact with pagan learning, the catechumen school of the Alexandrian synagogue became a theological seminary in which the Holy Scriptures were taught side by side with Græco-Roman philosophy.

No special buildings were appropriated, and the catechists, as in the catechumen schools, met the student in his own home or some convenient part of the church.[†]

"The students were of both sexes, of very different ages. Some were converts preparing for baptism, some idolaters seeking for light, some Christians reading, as we should say, for orders or for the cultivation of their understanding." ‡

At first the course of instruction was not very definitely organized, but later it embraced training of a very high order in mathematics, physics, philology, philos-

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^{*} Davidson's "History of Education," p. 122.

[†] The Alexandrian catechists received no fixed salary, but were supported by gifts from their pupils.

[‡] Davidson's "History of Education," p. 123.

ophy, and theology. All other subjects were to be handmaids of theology. The connection was rather a compromise than a conflict with heathen learning. Clement, one of its earliest and most distinguished heads, in describing the attitude of the institution toward heathen learning, said: "The Mosaic law and heathen philosophy do not stand in direct opposition to each other, but are related like fragments of a single truth, like the pieces, as it were, of a shattered whole. ... Both prepared the way, but in a different manner, for Christianity."

Although the Alexandrian catechetical school, likely through its close affiliation with the city university and the university library, to which both the students and teachers had access, reached the highest eminence, similar institutions flourished at Antioch, Athens, Edessa, Nisibis, and elsewhere. Long before these schools had reached their greatest attainments, the church had begun to organize, at the sees or seats of great bishops, the so-called "cathedral" schools, or "theological seminaries" proper.

The Church Fathers.—The final conflict between Christianity and paganism is seen to best advantage in the attitude of the "Church Fathers."* They were usually converts from the learned classes of paganism. Those who were contemporary with Christ's apostles are known as the Apostolic Fathers, and the later ones, because of the part they took in establishing and de-

* "The early teachers and expounders of Christianity, who, next to the Apostles, were the founders, leaders, and defenders of the Christian Church, and whose writings, so far as they are extant, are the main sources for the history, doctrines, and observances of the Church in the early ages," are commonly known as "Church Fathers." fending the doctrines of Christianity, are called the "Apologetes."

Greek Fathers.—During the first three centuries these learned Greek converts to Christianity, as noted in Clement's case, generally continued to pay a good deal of homage to pagan culture, and even when, as it happened in the fourth century, this admiration for pagan culture waned, Basil the Great and other thinkers were not willing to exclude it from Christian schools.

(1) Justyn Martyr, a second-century converted teacher of philosophy, continued to teach Greek philosophy. He claimed that Socrates, Plato, and Heraclitus were Christians before Christ came, and that although philosophy fell short, it had the same high ends as Christianity.

(2) Clement (160-215), the successor of Pantænus at Alexandria, held that Plato was Moses Atticized, and that pagan philosophy was a pedagogue to bring the world to Christ.

(3) Origen (185-254), the successor of Clement, and the most learned of the Christian Fathers, said, in speaking of the sciences of the Greeks: "Philosophy, rightly studied, disposes us to the study of Christianity."

(4) St. Basil (331-379), in whose century the opposition of the Christians to pagan learning and especially to Greek philosophy had become more pronounced, united with Gregory of Nazianzus (325-390) to show that Greek literature is helpful in instruction both in principle and event, and that it leads to the higher life both by precept and by example. And yet—and it shows that Christianity was finally winning—St. Basil, in speaking of the education of children, sums up his final judgment thus: "The choice lies between two alternatives: a liberal education which you may get by sending your pupils to the public [pagan] schools, or the salvation of their souls, which you secure by sending them to the [Christian] monks. Which is to gain the day, science or the soul? If you can unite both advantages, do so by all means; but if not, choose the most precious."*

(5) St. Chrysostom (347-411), though not in condemnation, it is true, yet with greater disparagement, tells us that he has long ago laid aside such follies on the ground that they are only child's play.

Latin Fathers.—The Latin Fathers, unlike the Greek, were opposed almost from the first to pagan learning. The Roman mind, as we here recall, admired practical achievement and cared little for philosophy, and the Latin Fathers, in their opposition to pagan culture, were simply the interpreters and mouthpiece of this Roman mind. Judaism with its ethical impulse, and Revelation with its emphasis on the future, appealed more powerfully to them than Hellenism with its intellectual subtleties and its dramatic ceremonies. We are not surprised, therefore, that the most representative Fathers, in spite of the fact that all had been teachers and steeped in pagan culture, eventually discountenanced and even forbade such study among believers.

(1) Tertullian (150-230), the earliest of the Latin Fathers, in his "Prescriptions against Heresies," expresses this attitude of the West very definitely: "What indeed has Athens to do with Jerusalem? What concord is there between the Academy and the

* Monroe's "History of Education," p. 240.

Church?... Away with all attempts to produce a mottled Christianity of Stoic, Platonic, and dialectic [Aristotelian] composition!"

(2) In St. Jerome (331-423), author of the "Vulgate," a Latin version of the Bible, this conflict between the Christian faith and classical learning became most clearly defined. While we know, from his habit of quoting the classical authors, that he found it hard to condemn, he nevertheless expresses his best judgment in the matter in the celebrated "Letter to Læta," where he is in doubt whether such authors should be permitted at all. If so, their study should be "rather to judge them than to follow."

(3) In St. Augustine (354-430), author of the famous "City of God," and voluminous writer on education, we see the same powerful attachment to pagan learning overpowered by better judgment, and his decision against it. He is considered personally responsible for the prohibition of philosophical and literary study made by the Council of Carthage, and even for the suppression of pagan schools (529 A. D.) by an edict of Justinian.

Thus Christian education, though in some respects permanently modified and enriched, was left alone in the field for a while to work out its powerful impulse of otherworldliness. This blow to pagan learning, together with the coming of the Teutons, ushered in the "Dark Ages."

REFERENCES

- 1. Myers' "General History."
- 2. Geikie's "Life of Christ."
- 3. Monroe's "Cyclopedia of Education."
- 4. Monroe's "Text-Book on Education."

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- 5. Davidson's "History of Education."
- 6. Graves' "History of Education," vol. I.
- 7. Graves' "Students' Text-Book."
- 8. Duggan's "History of Education."

QUESTIONS

I. What long process of amalgamation of ideals was hardly yet at its height when Christ was born?

2. Go into the details of Christ's education, giving proper credit to the various elements. Can we account for him wholly on human grounds?

3. What human relations, so imperfectly understood even by the greatest minds among the ancients, did Christ explain completely?

4. What recognition does the Christian ideal accord to the claims of individuality, the social whole, and God?

5. What, according to this ideal, becomes the task of the Christian state?

6. Explain the educational redemption which Christ brought to caste men, slaves, women, and children, going fully into details.

7. What was it in his method of teaching that distinguished him from all other teachers, and thus made him incomparable?

8. Does psychology account completely for his marvellous insight, sympathy, and skill? Discuss in detail.

9. What were some of the hindrances which made it difficult for the early Christians to work out the educational redemption to which they were entitled?

10. Explain the difficulties of their poverty, ignorance, small number, lack of books, and the attitude of the Roman emperors, going fully into details.

11. What was the "otherworldliness," or asceticism, so conspicuously the motive of early Christian education?

12. Trace the origin, purpose, curriculum, details of method, and history of the catechumen schools.

13. Describe the Alexandrian catechetical school—and others —going into the details of purpose, origin, organization, curriculum, attitude toward paganism, teachers, pupils, and history.

14. What were the Church Fathers? Describe their origin. 15. What was the attitude of the Greek Fathers toward paganism from century to century? 16. What was the attitude of the Latin Fathers toward pagan-

ism from century to century?

CHAPTER X

CHRISTIAN EDUCATION (CONTINUED)

MIDDLE AGES

The fall of Rome (476 A. D.) following the successive attacks which the barbarians^{*} under Alaric, Attila, and Genseric, together with other great leaders, delivered upon the empire already crumbling under corruptions from within, and the generally disturbed conditions of society which succeeded all these events, left the church—especially after Justinian had closed the pagan schools—the sole custodian of education for centuries. She fulfilled this mission with great credit to herself, notwithstanding the fact that, under the too powerful dominance of asceticism, or otherworldliness, her development of education was, from many points of view, seriously one-sided.

We shall attempt, in this chapter, to explain the course of events from the time when the church first assumed her trust to the time when, on account of her failure to recognize the right of individual judgment, and on other accounts, she had to undergo thorough reformation. The whole subject may be conveniently considered under the following general topics: The church schools; the educational dream of Charlemagne, the great friend of the church schools, and what came of his dream through feudalism; scholasticism; the educational facilities which the Crusades, fathered by

* Myers' "General History."

the church, produced; what the Mohammedans contributed to one of these results, namely, the universities; the brethren of the "Common Life"; the rise of modern literature, and the revival of learning, which paved the way for the sixteenth-century reformation of the church.

THE CHURCH SCHOOLS

When through the decree of Justinian (529), closing pagan schools, the church became the sole custodian of education, her burden was almost greater than she could bear. In the interest of the controlling "otherworldly" impulse which, through the extreme corruption of the Roman Empire, was becoming still more insistent, if anything, in the fifth and sixth centuries, the catechumen schools, preparing for church membership, and the cathedral schools (bishops' schools), preparing for the priesthood, had to be kept constantly in mind. But the great work of completely converting the Teuton hosts who had taken possession of the Roman Empire, and of welding the Christian world into a spiritual empire, like that of Rome, induced the church to grant the monopoly of education to that remarkable "otherworldly" organization known as "monasticism."

MONASTICISM

Origin and Nature of Monasticism.—Paganism had emphasized the present above the future, and the body above the soul. The belief of the early Christians in the immediate nearness of the "second advent" reversed the order of these interests, as has already been stated, so that presently, certainly before the close of the third century, choice spirits, especially among the clergy, renounced the world as completely as they could by withdrawing into deserts and forests to live a life of contemplation and bodily mortification as a higher preparation for the coming of the Lord. In time this deliberate self-isolation became an institution of marvellous force, called "monasticism," from the Greek word $\mu o \dot{\nu} o s$, meaning "alone."

Spread .- Monasticism had its origin in Egypt, where it gained its earliest prominence through the celebrated St. Anthony, who began his life of selfisolation there in 305 A. D. He was a hermit, pure and simple, like many before and after him. As early as 330, Pachomius, probably because he recognized the self-defeating strain and selfishness of the hermit life, founded a "family" of brother hermits on an island in the Nile. In this community life of hermits the principle of self-isolation was not abandoned, it is true, but, by permitting association at meal-times, prayers, and religious services, the strain was sufficiently modified to make it at least endurable. St. Basil introduced this "cenobite," or family, monasticism into Greece in 350, and Athanasius and Jerome into Rome a little before or a little later, where it, instead of the hermit type, became the model for the whole Western world. For about two centuries each separate community was governed by rulers of its own invention, but always in harmony with the fundamental ideals. In the year 529, the year in which, as we recall, Justinian closed the pagan schools, St. Benedict, a Roman patrician, as an escape from the scandals and corruption of Rome, founded the monastery of Monte Cassino, not far from Naples. He drew up a monastic constitution, consisting of seventythree articles, in which he dealt in great detail with the organization of this monastery and its daily life. The code, or rule, of St. Benedict became the model for nearly all the monasteries of the West, and the groundwork for all succeeding monastic orders.

Ideals .- All the aspirations of monasticism, revived remnants of Oriental quietism and Greek philosophies, as they would appear to be-revived by new concepts derived from scriptural interpretations-are sharply summed up into three vows which the monks were required to take; namely, those of poverty, chastity, and obedience. The great problem of reconciling the claims of the individual with those of the social whole, so conspicuous and pressing both in Oriental and Græco-Roman life, are evidently all merged into the superior claims of God on the soul and the supreme need of the soul to be at peace with God-a mental attitude which certain injunctions of the Great Teacher himself seemed to justify. In the first vow, accordingly, the monk renounced all such material interests as might hamper the soul in her progress toward Christian holiness; in the second, all those intimate social relations of marriage and family life which tend to rob God in Christ of any love; and in the third, all those relations of citizenship which hamper the church in her world-wide mission of salvation. It will be recognized at once that these ideals, antisocial as they are in outward aspect, are really a great guarantee that the church shall not lack workers and teachers and preachers and missionaries. In his forty-eighth article St. Benedict orders that at least seven hours of each day be devoted to manual labor, and at least two hours to sacred reading. While the requirement of manual labor furnished the ignorant population of Europe with expert agriculturists and craftsmen, the requirement of sacred reading made the monasteries not only the publishing-house and library of the Middle Ages, but also the centre of literary activity and the great "ready-to-hand" educational agency of the church.

The Monastic Schools.—It is, however, with the distinctly educational results that we must here be concerned first of all. If those who joined the order were to read the Holy Scriptures, the Church Fathers, and the church missal, they must, of course, be taught reading, and, in the absence of printed books, writing must be taught so that the monks might take part in the copying of manuscripts. "Singing" was taught for the sake of religious services, and "reckoning" to calculate the church days.

The Seven Liberal Arts.—In time the rudiments of "the seven liberal arts" of the Greeks, *i. e.*, grammar, rhetoric, dialectic (logic), and arithmetic, geometry, astronomy, and music—later divided into the "trivium" and the "quadrivium"—became the regular curriculum. The names do not express the content of the several subjects, each one growing gradually from rudiments to a body of well-organized knowledge. Grammar included not only reading and writing, but literature, sometimes extended in the better schools, even to Vergil and other pagan authors. Rhetoric in time came to include history and law. Dialectic (logic) grew from simple Aristotelian statements into scientific reasoning and metaphysics. Arithmetic, until the Arabic notation became available, amounted to little more than simple calculations, but later grew to larger proportions. Geometry, based on Euclid, came to include geography and surveying. Astronomy developed from the rudiments to a systematized body of doctrine, and presently added physics. Music rose from simple psalmody into organized theory, the celebrated Boethius becoming the recognized authority.

At first, of course, only the rudiments of each of the seven arts—called "liberal" because they were supposed to cover the whole range of possible subjects were studied, and the importance of each art depended upon the needs of the times, grammar and rhetoric leading, as long as a knowledge of Latin was most essential, that is, the first half of the Middle Ages. When the influence of Saracenic learning, spreading from Spain, began to be felt in the monasteries, arithmetic, geometry, and astronomy grew in importance. The whole curriculum was always only a handmaid to the study of the Scriptures, and tolerated only as a means to this end. The course was preparatory to the more serious study of theology in the cathedral schools.

Methods.—At first only youths whose object it was to join the order were received as students. Later this restriction was not so interpreted as to exclude other youths. The Franciscan convents began to provide at least an elementary education for girls. Although seven or eight was the age of admission, membership in the order was not permitted before eighteen. Latin, rather than the mother tongue, continued to be the language of the schools. The catechetical method of instruction was extensively employed, and the practical difficulty of supplying the pupils with enough manuscripts, made dictation on the part of the teacher and copying on the part of the pupil the laborious necessity. Memorizing, rather than reasoning, was prevalent. We are not surprised, therefore, that the discipline was rather severe, extending even to the use of the rod.

Parish Schools.—Under monasticism catechumenal education, as a preparation for church membership, became the function of the parish priests connected with the cathedral diocese, and of the bishops' clerks. Reading, writing, and singing were taught in connection with the catechism, as before. In other words, monasticism failed to provide in any special way for primary church education.

Cathedral Schools.—Under monasticism formal education for the priesthood gradually passed out of the jurisdiction of the cathedral bishop, and became the function of the monks. The divorce of theology from philosophy, which, in the West, "otherworldliness" had made almost complete in the sixth century, except in the Irish monastery of Iona, and some other important places, like St. Gall in Switzerland and York in England, remained an institutional fact, and the course amounted to little more than an advanced monastic course. However, in St. Gall and York philosophy continued to flourish, together with Greek, long after the separation from Rome.

Estimate.—That monasticism never recognized the cause of popular education; that it kept catechumenal education at a low level; that, by extreme subordination of reason to faith, it degenerated rather than promoted theological training—all these defects, and others, must be regretfully admitted.

On the other hand, monasticism as an educational

agency, contributed powerfully to the Crusades, or Holy Wars; by gradual reversion from extreme "otherworldliness" to classic learning and philosophy, from both of which it had parted only under compulsion, it paved the way for scholasticism—and through both of these results, for the coming of the mediæval universities.

CHARLEMAGNE

It is practically the unanimous opinion of biographers* that Charlemagne (Karl the Great) was great with an all-round greatness that could not be fairly predicated of any other great man in history.

Ambition.-Charlemagne was born at Aix-la-Chapelle in 742 A. D., and died there in 814. He inherited the throne of his father, Pepin the Short, and his grandfather, Charles Martel; but the troublous age of which he was the product, unhappily failed to supply him with the education for which his capabilities fitted him, and this probably accounts for the lifelong efforts which he made to supplement his deficiencies. It became his mission to conquer the greater portion of western Europe to save the Christian civilization which his ancestors had founded in Frankland. In 800, it will be remembered, Pope Leo III gave him the golden crown of the Holy Roman Empire, thus adding the tremendous power of the church to his own ambition. His ambition to conquer, unlike that of Alexander the Great before him, and of Napoleon after him, was not an end but only a means. His supreme ambition-his inspired dream, if we might call it that -was not political conquest, but the welding of a

* Lord's "Middle Ages."

great Christian empire out of the unformed Teutonic barbarians who surrounded Frankland, and continued to threaten its safety until he at length could make himself their acknowledged master.* His astonishing wisdom, when we consider the times in which he lived, is evident in his selection of means to ends. He realized that the unity at which he aimed must needs be spiritual rather than outwardly forcible, and therefore based on unity of language, religion, and culture. And it was this unwavering attitude that made Charlemagne a great educator, as well as a great sovereign.

Educational Activities .- Charlemagne promoted education in three ways; namely, through his palace school, his capitularies, or decrees, and his "missi dominici," or official messengers.

Palace School .- With the remnants of the palace schools, which it appears his "fathers" had maintained, to work upon as a foundation,[†] Charlemagne proceeded to establish an ideal court academy which should serve as a model and at the same time supply the necessary teaching forces for his kingdom. He accordingly summoned to his side the learned men of his times, beginning with his father's educational adviser, Peter of Pisa, and through him, Paul the Deacon, both of them prominent scholars of Lombardy. In 782 he called to his court the learned Anglo-Saxon scholar, Alcuin, the head of the famous cathedral school at York in England. This man, a little older than Charlemagne himself, and a conspicuous champion of St. Augustine's views, was to be his chief minister of education. He brought three teachers with him to Aix-la-Chapelle.

* Davidson's "History of Education," p. 155. † Graves' "History of Education," vol. II.

Charlemagne himself was a pupil of Alcuin, and so were his queen, his three sons and two daughters, his sister, his son-in-law, and three cousins. Prominent ecclesiastics and scholars, including his biographer Einhard, also belonged to the school.

With the younger learners Alcuin used the catechetical method of instruction, but for older minds a more discursive method. Among the subjects taught were reading, writing, and singing, together with the Holy Scriptures, the seven liberal arts, Latin, and a little Greek. Charlemagne himself acquired the power to converse fluently in Latin, and knew a little Greek. His pathetic effort to write a good hand is well known to our readers. He favored the education of girls, and took special pride in the training of his own daugh-ters. The fact that the school "moved" with the king in his "circuits" must have caused embarrassing interruptions, but the encouragement which Charlemagne gave to education by making all sorts of courtly favors and promotions depend upon application on the part of pupils, and upon efficiency in their attainments, is praiseworthy to a very high degree.

Capitularies.—In 787 Charlemagne issued an educational capitulary to the abbots of all the monasteries, of which the copy sent to the famous one at Fulda, in east Frankland, or northern Germany, has come down to us. In this capitulary he reproved the monks for their illiteracy and urged them to a better understanding of letters and the Holy Scriptures. Two years later, in a still more urgent capitulary addressed to the abbots and bishops, he outlined a definite curriculum for the monastic and cathedral schools, not forgetting even the parish schools, and specifying the kind of teaching on which he would insist. Much as he revered the church, as we see in all his relations with the pope, he did not hesitate to make the monks obey orders, and, in addition to the request that the priests preach oftener in the language of the people, he required them to give a good deal of time to teaching.

Official Messengers.—Charlemagne recognized that unless decrees are enforced they may not bring results, and so he appointed messengers (missi dominici), who should visit, observe, and report to him, not only what they found in the frontier governments which he had established, but especially also in the schools. There is evidence enough that he carried out these plans, for there was an immediate and decided quickening in all the existing educational institutions and an effective addition of new facilities.

Influence.—Charlemagne's spiritual successors in the educational reforms which he undertook carried out his noble ambitions, even after his death, and, in some respects, surpassed all his dreams.

Alcuin.—In 796 Charlemagne permitted Alcuin to withdraw from the active headship of the palace school and to become the abbot of the monastery of St. Martin at Tours, the oldest and wealthiest in Frankland. Here he established a model monastic school, wrote books, and produced disciples who attained to prominent places everywhere in Europe. One of these was Rabanus Maurus (776-856), the progressive and successful head of the monastic school at Fulda. Probably the greatest successor of Alcuin was Johannes Scotus Erigena (810-876), the Irish scholar, who as head of the Frankish palace school became the forerunner of scholasticism. Among the far-reaching results of Charlemagne's reforms, in spite of the political chaos that followed his death, was the work which Alfred the Great (871-901) undertook to do in England, where his translations of the classics and his ardent imitation of Charlemagne's educational establishments promoted Christian civilization and political efficiency to a wonderful degree.

THE SARACENS

It was through the Saracens, the Arabian followers of Mohammed, as well as through the educational successors of Charlemagne, that Græco-Roman culture, ostracized from western Europe, again became affiliated with Christianity.

Mohammed's "Crescent."-In 570 A. D. there was born at Mecca an Arab who, through the impulse which he imparted to his followers, threatened for nearly a thousand years to submerge Christianity. This unique man was Mohammed. Given by nature to contemplation, he had, as a young man, travelling in Arabia and Syria, become profoundly affected by Jewish and Christian ideas, commingled with a vast mass of nondescript accretions. He had noticed * the power of the "book" among these people, and became deeply convinced that what his own warracked country needed most for its peace was the unifying power of a lord and a book. And to this task this strange man, now forty years old, and unable-to read or write, as his biographers believe, but urged by inner persuasion, set himself. The result was the Koran, an astonishing mixture of Jewish, Christian, and Arabian elements, with the Jewish elements

* Davidson, p. 135.

greatly predominating. The book did not take full form until some time after his death. From his exile and flight to Medina in 622—the "hegira" as it is known—he returned, and before he died, in 632, he had induced all Arabia, by force of arms, to accept the Koran. His successors, the "caliphs," made themselves master of Persia, India, and Syria, and then, in their effort to carry this same Koran into Europe, which they approached from the side of Constantinople and northern Africa, they produced the "crescent empire," with its eastern horn at Constantinople and the western at Tours, France, where Charles Martel stopped their further progress, 732 A. D.

Educational Activities of the Saracens.-As long as the Koran, in the course of its conquest, came in contact only with the unreflecting, unphilosophic Arabs, "it needed no support from learning and called for no special education." Its contents could be communicated by word of mouth and committed to memory; but when it reached Syria, Persia, India, and Egypt, it faced a new problem. In Syria, for example, Hellenized by catechetical schools like that of Alexandria, and others founded at Nisibis, Antioch, and elsewhere, the Koran found it exceedingly difficult to win converts; and this difficulty was so enlarged by the Nestorians who, expelled from the Roman church by the Council of Ephesus (431 A. D.) on account of Arianism, had also sought new fields of labor in Syria, that it became absolutely necessary for the Koran to garb itself in Hellenism in order to win the Eastern world extensively. The educational results were marvellous.

In Arabia.—Through the impulse of Hellenism thus allied with Mohammedanism, Greek science, medicine,

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and philosophy were given to the crescent empire first in Syriac and then in the Arab language. The most celebrated Arab writer on mathematics, medicine, and philosophy was Avicenna (980-1037). From the Hindus—not only from the Syrians—the Arabs learned not only a system of notation, but also higher mathematics, astronomy, etc. Schools and libraries sprang up in large cities, and literature flourished. While Europe, except on the east and among the Irish, lay in darkness, the "crescent" lay in light. In the days of Haroun al Raschid, a contemporary and correspondent of Charlemagne, Bagdad and other Arabian cities—if we may trust such a book as the "Arabian Nights" as a true reflection—must have fairly revelled in physical and mental glory.

In Spain.-The orthodox Arabs, however, had little patience with this Hellenization of Mohammedanism, and its uncomfortable devotees betook themselves (1050 A. D.) to Spain, where they became known as "Moors," and by the twelfth century produced a brilliant revival of learning in such cities as Cordova, Toledo, Granada, and Salamanca. In these institutions were taught mathematics, science, law, philosophy, and letters. Among the famous Moorish thinkers was Averroes (1126-1198), the greatest commentator of Aristotle that appeared from the fall of Rome to the Renaissance. His commentaries, translated into Latin, became a special authority among schoolmen, and helped to shape such distinguished scholars as Albertus Magnus and Thomas Aquinas. In other words, Aristotelian Hellenism, as already noted, put Christian orthodoxy in Europe on the defensive, and thus transformed Roman theology into "scholasticism."

SCHOLASTICISM

The new impulse which Charlemagne had given to education was supplemented from the ninth to the fourteenth century by a revolt of reason from authority in religion, and this revolt has been called "scholasticism" from the Latin word "scholasticus," or schoolman, thus calling attention to its origin in the monastic and cathedral schools.

Origin.—At least three influences contributed to the rise of mediæval scholasticism, namely, Mohammedanism, recovery from "adventism," and the Crusades.

History.—When, in the eighth century, Mohammedanism came into Spain to stay, Christendom soon began to find it necessary to defend such doctrines as the Trinity and the Incarnation. This awakening, having for its purpose the vanquishing of heresy, led to a systematic restatement of the fundamentals of theology, and, through such scholars as Johannes Scotus Erigena, ushered in the great demands of reason on faith, especially the Augustinian type of faith, based so absolutely on authority. But monasticism, fortressed in the otherworldliness of early adventism, surrendered to reason only by degrees, and with stubborn unwillingness.

It was only when Europe began to recover from the chronic panic of adventism, and from the unsettling fear of invasion by the Norsemen, that, about the beginning of the twelfth century, learning once more dared to return somewhat unhampered to "man and nature," and thus to the claims of reason in religion. Nevertheless, it continued to be the aim of the earlier 2

schoolmen, as with Anselm (1033-1109), of the Canterbury Cathedral, to show that the accepted doctrines of Christianity were really consistent with each other and in harmony with reason. Anselm held that faith must precede reason, and that when reason cannot measure the heights and depths of revelation it must desist from effort. Abelard (1079-1142), the brilliant Frenchman, whose romance with Héloise lends everlasting charm to his name, and the fame of whose lectures have never ceased to attract the learned world, "declared that the only justification of a doctrine is its reasonableness, and that reason must precede faith."

Due to more intimate contact of the schoolmen with Saracenic, or Moorish, Hellenism in Spain, and especially to the recovery of the original works of Aristotle by Venetian crusaders who captured Constantinople, the conflict between the two views reached its greatest height in the twelfth and thirteenth centuries through such past masters in thinking as Thomas Aquinas (1225-1274), Duns Scotus (1274-1308), and William of Occam (1280–1347). In these contentions orthodoxy at first repudiated Aristotle and his works, but, finding it impossible to overcome the Greek master, adopted him bodily, and thus gave final shape to scholasticism, or logical theology. Thomas Aquinas, the "angelic doctor," an Italian theologian of the Dominican order, whose followers were called "Thomists," exalted reason in religion, and gave to the Roman church a system of theology which still continues in authority. Duns Scotus, a Scotch Franciscan, surnamed the "subtle doctor," exalted the will, and thus reduced theology to its practical implications. William

of Occam, an English philosopher, surnamed the "invincible doctor," went a step farther by asserting that theological doctrines were, strictly speaking, not matters of reason, but of revelation and faith. This position, emancipating theology from philosophy, began to be accepted more and more, and thus virtually destroyed scholasticism.

Method.—In the history of education we are probably more interested in the method of scholasticism than in its mental attitudes toward Christianity. As a method scholasticism was a logical study of theology, and Aristotle's method of analytic deduction the form to which all statements and arguments had to be reduced. It was the debates to which such a process gave rise in the cathedral schools, and later, in the universities, that divided the schoolmen into the "Thomists" and "Scotists," and that gave the whole intellectual world such a reviving impetus.

Influence.—The first effects of this debating system, in its exaltation of logic, had the tendency of reducing the orthodox curriculum of the monastic and cathedral schools to dry formulas, from which, however, the universities recovered after the Crusades. And it is certainly true that the dogmatism and subtleties and abstract intricacies in which the schoolmen indulged was not a preparation for life and religion. Nevertheless, as a little reflection will show, even such an argument as that of Thomas Aquinas, about the number of angels that can stand on the point of a needle, shows that at heart the great purpose of all such intellectual fencing was "to present the nature of the infinite in concrete form." All in all, scholasticism served the world best by its dissolution, thus granting

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to theology and philosophy spheres of their own, without denying the function of either, while the direct and more immediate results were its contributions to the universities and to the Renaissance of the fifteenth century.

FEUDALISM

The adverse effects of feudalism on education during the darkness of the early Middle Ages, of which darkness indeed it was a potent cause, and the "new day" which, allied with the church, feudalism helped to produce through the Crusades, makes at least a brief explanation of its origin and course of development necessary in the history of education.

Origin.-While the Teuton warriors who conquered Rome were individually proud and independent, they were also loyal to their chieftains. These were the conspicuous traits of native Teuton character. The relation to which attention has just been called is seen to great advantage in the division which these chieftains made of conquered Europe among their loyal retainers; for, while the chieftain thus surrendered parts of his domains, he could in turn depend upon the holders in his wars. In the course of centuries these social relations included even persons and institutions whose tenure of land did not depend directly upon service, but who, to secure protection needed in the many wars between the castled chieftains, attached themselves voluntarily to some powerful lord, and then it became necessary to define with severe nicety the intricate multitude of higher and lower relations. Thus arose and grew the feudal system of the Middle Ages.

It was the complication of wars and the coincident

building of castle fortresses that succeeded the immediate break-up of Charlemagne's empire, through the treaty of Verdun, in 843, and the subsequent division of Europe into feudal estates, that shattered the educational dream of Charlemagne, and that submerged all educational interests more or less up to the time of the Crusades.

The feudal lords generally recognized the popes as spiritual overlords, and the chapels which these lords built in close connection with the castles became in time the great cathedrals.

The esteem in which the Teutons held woman, and for which Tacitus praised them to shame the Romans, became the ready ally of religious veneration, and thus in time the higher aspirations of feudalism were gathered up in three ideals, namely, "religion, honor, and gallantry."

Chivalry.—This Teutonic idealism passed through two stages, which have been called the "heroic age" and the "age of courtesy." In the former stage religion was the dominant note; in the latter, gallantry. The refinements of feudalism of this second period have been distinguished from the earlier coarseness by the term "chivalry," an abstract name derived from the French word "cheval," meaning horse, because the lords fought on horseback. Probably the close alliance of the church and the lords in the joint undertaking of the Crusades, or Holy Wars, was the cause of transition from the former to the latter stage of feudalism.

The Crusades.—It was, of course, the first of the three ideals, namely, the religious impulse, that produced the Crusades. When the Turks, who had wrested captured Jerusalem from the Arabs, insulted European pilgrims who, for reasons of piety, or penance, came to visit the Holy Sepulchre, bitter resentment on the part of the church allied itself with the dramatic opportunity for penance on the part of the lord and people alike, and thus in 1096 began the fateful expeditions—seven or eight of them—which were destined to cover Europe with sorrow and shame for several centuries, but which contributed to education in at least three ways: first, by adjusting palace schools to the quickened ideals of feudalism, or chivalry; second, by producing commerce, and thus the burgher schools, and third, by promoting scholasticism and Saracenic learning, and thus the universities.

THE KNIGHT SCHOOLS

The emphasis into which the Crusades quickened all the ideals of feudalism, as already noted, produced the knight schools. The palace schools, with their crudely organized courses, became the simple model upon the basis of which education was adjusted to the special needs of the times. Thus arose three well-defined periods in the education of a knight, namely, the home period, the "early teens," and the "later teens."

Home.—Up to the age of seven the boy remained at home, and his health, religion, and morals were carefully supervised by his natural guardians. Among the virtues specially cultivated were obedience, respect to superiors, and common courtesy.

A Page at the Castle.—At the age of seven every boy for whom chivalry made any provision was sent to the castle of some lord, usually the father's overlord,

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to complete his education. Here he became a "page" to the lady of the castle, whom he served for seven years in various ways, and under whose special supervision he learned reading, writing, singing, dancing, and courtesy, and also how to write verses, play the pipe, play chess, etc. In his outdoor life he learned to box, wrestle, ride, swim, etc.; and, as a page, accompanied the ladies when hunting or hawking. In short, while religion, honor, and gallantry were thus taught in the rudiments, gallantry was emphasized.

As a Squire.—At the age of fourteen the page became a "squire." Henceforth he was still the lady's attendant, and continued to hunt, sing, play chess and the harp with her, but allegiance to his lord rose to greater emphasis. It became his duty to wait upon his lord at the table, to look after his armor, to attend him in the "tournaments," and in actual battle, or on the hunt; and, in the performance of these duties, he gradually mastered the art of war, especially how to ride, and fight in full armor with sword, spear, and battle-axe. Thus, while religion and gallantry were not sacrificed in this period, "honor" and its claims had to be emphasized.

Knighthood.—At the age of twenty-one, unless lack of property prevented, the goal of knighthood was attained. After weeks of religious preparations, ending with a night of solitary waiting in the church, and the partaking of the holy sacrament at the altar in the morning, the young man received a priest's blessing. Then, taking the oath to defend the church, to respect the priesthood, to attack the wicked, to protect women and the poor, to preserve the country in tranquillity, and to shed his blood in behalf of his brethren, he was knighted, and rode forth into the world to prove his worth.

Women.—Chivalry, contrary to the ideals of monasticism, exalted woman. Her education, except in physical and military aspects, resembled that of her brothers. Usually, to a knowledge of household duties, and the ordinary course in reading, writing, singing, and dancing, was added some training in sewing, weaving, embroidery, and occasionally Latin and "letters."

Influence.—Chivalry had little use for monkish austerity, and often failed in its ideals of honor and gallantry. Nevertheless, it was a real protest of right against might, it emphasized the sacredness of the oath, and paved the way for modern chivalry, or politeness. It called attention to the present life, which had suffered so much from the otherworldliness of monk and nun.

In the ballads and lyrics that were sung, and the tales that were told, during the long winter nights in the castle hall, we have the rise of modern literature, for the "troubadours" of France and the "minnesingers" of Germany were devoted to the mother tongue.

Then, too, the ideals of obedience and service modified the extreme individualism of the Teuton, which, as a solution of the problem of adjusting the claims of the individual to the social whole, was as necessary as the modification of excessive state control among the ancients.*

THE BURGHER SCHOOLS

Inasmuch as the church continued to purchase a variety of utilities, and the nobles such luxuries as * Myers' "General History," p. 428.

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pleased their love of barbaric splendor, commerce was never all driven from western Europe, but the towns and cities which the Romans had left in their wake, except those of France and Italy, had been practically all swept away by the Teutonic occupation of Roman Europe. In their place had sprung up the settlements of the feudal lords and their retainers, isolated communities whose centre was the castle and round about which grew up a village and people supplying the simple needs of life by their own energies and holding aloof from the rest of the world. This remained the condition of things up to the time of the Crusades, and far within the twelfth century.

The Crusades Revived Commerce.—The Italian cities, notably Venice and Genoa, were called upon to furnish the ships and transports to convey Crusaders, thus establishing routes of connection between the East and Europe, and revealing to Europe the wealth and luxury of the East. Trade sprang up inevitably, for the West found it necessary to produce what the East would accept in exchange. And presently the West began to manufacture at least some of the articles of luxury until then imported from the East. This in turn produced an exchange of articles all over Europe, and then the media of exchange, together with credits.

Growth of Cities.—As a result new towns and cities began to spring up all over Europe, centres of industries and commerce, and many of them became immensely rich. The serfs, in their turn, soon discovered that the lords needed money, and that in lieu of it they could escape the more direct service to which they had been bound by the feudal system in its earlier development. Serfdom thus gave way to a large "burgher" class—a city folk with whom the lords found it necessary to treat for favor, by granting the cities charters of self-government, together with rich concessions to the merchant class and the various crafts.

Educational Results.—The time thus came, before the close of the thirteenth century, when the cities could vie with the church, not only in comfort and luxury, but also in the educational facilities which they offered as a necessary preparation for the city life. Apart from several nondescript efforts and the wandering adventurers who went about from town to town advertising themselves as teachers, because the demand for schools was greater than the supply, there were at least three well-defined species of burgher schools: the "guild" schools, the chantry or parish schools, and the "writing" or burgher schools proper, and into which all the others were finally merged.

Guild Schools.—In order to protect themselves against unfair encroachments, and overproduction, the various crafts, such as the shoemakers, the silversmiths, the tailors, and the merchant classes, arranged for apprenticeships covering years of service within the house and home of a master, and followed by tests leading to journeymanship and then to mastership. Only those on the governing board of a guild were allowed to have more than one apprentice. Although the service was exacting, the rights of the apprentice were usually safeguarded with much punctiliousness, often including the rudiments of an education in reading, writing, and reckoning. Among the merchant guilds, and sometimes among the crafts, geography, history, bookkeeping, and even grammar, were not uncommon as parts of the course. Sometimes Latin and "letters" were added, as in the celebrated cases of the Merchant Taylors' School in London, or the equally famous grammar-school at Stratford-on-Avon, England, where Shakespeare learned "a little Latin and less Greek." These schools, like the chantry schools, now to be described, were gradually merged into the town, or burgher, organizations.

Chantry Schools.—The custom sprang up among well-to-do people to provide by will for the saying, or chanting, of masses for the dead belonging to their family. Inasmuch as this service, to which a priest was called, would not occupy very much of his time, it soon became a part of the stipulations that the "chantry priest" devote some of his time to the education of the children of the family and of others in the parish. Sometimes two priests were called into such service, one to teach singing and the other to teach grammar, both of these studies to be connected with other rudiments of education.

Burgher Schools Proper.—In the burgher schools proper, where reading, writing, reckoning, and such branches as geography, history, and bookkeeping were the main preparations for industrial and commercial life, the teachers were not always priests, but the church continued for a long time to claim supervising powers, and the contests for such power were sometimes little less than violent. Where the municipal authorities gained the upper hand, the head teacher was employed by contract, and he in turn employed assistants. The latter were commonly very poorly paid, and poorly qualified for service. In the effort to improve their condition, these teachers seldom remained long at the same place, and came to be known as "vagantes," or wanderers. In their journeys they were sometimes accompanied by pupils who, because of their habit of purloining fowls as parts of meals, became known as ABC shooters. The time for special buildings had not yet come, and the sessions of the burgher schools were held in churches, municipal buildings, or rented places.

THE UNIVERSITIES OF THE MIDDLE AGES

Institutions in which all the learning of the time was imparted, and which may therefore be fairly called universities, such as those of Athens, Constantinople, Alexandria, and Nisibis, came to an end through Christian supernaturalism and the inroad of the barbarians before 800 A. D. Early in the twelfth century a similar fate, the result of orthodox fanaticism, overtook the universities which the Arabs had founded at Bagdad and elsewhere, and less than a century later those which the Moors had founded at Cordova, Toledo, and elsewhere in Spain.*

Origin of the Mediæval Universities.—In the meantime Christian Europe had become acquainted with Saracenic learning through Christian students who attended the Moorish universities of Spain in large numbers; through the Crusades, because they brought Europe into closer touch with Arabic culture, and thus greatly broadened the mental horizon; and through scholarly translations of Saracenic works, including the Koran, into Latin. When, in this way, Christian orthodoxy began to be threatened because reason dared to ask faith questions, scholasticism arose, as before explained. In other words, reason and faith had to

* Davidson's "History of Education," p. 166.

be reconciled if Christianity was to live. But reason, once unfettered as it thus came to be in the cathedral and monastic schools, and extensively among the youth of Christian Europe, became anxious to make inquiries on its own account. This spirit of inquiry, this desire to know, gave birth to the mediæval universities, which were the forerunners of modern universities. In their first form the mediæval universities consisted simply of teachers and students associated in the free pursuit of knowledge, and were not dependent in any way upon church or state for their existence, organization, or support.

Earliest Mediæval Universities.—The earliest mediæval universities owed their origin to distinctly local causes, as well as to the general causes just noticed, and developed in somewhat strict obedience to such local impulse.

Salerno.—Salerno, near Naples, became the seat of the first mediæval university. The place, on account of climate and mineral springs, had long been a popular health resort. Due to this fact, perhaps, the old Greek medical works survived there. Latin translations of these in the eleventh century, together with original contributions, helped to make the place a centre of medicine. Other causes contributed to the reputation of Salerno, so that, although it was never a chartered university, Frederick II lent his powerful patronage to the promotion of its success. For some reasons, however, Salerno never became a model for other institutions, and gradually lost its prestige completely.

Bologna.—The cities of northern Italy had never allowed the knowledge of Roman civil law to die out completely. When the German emperors threatened to rob them of their independence, it became important to establish their claims on Roman edicts, charters, grants, etc. This necessity produced an enthusiastic revival in the study of law, and early in the twelfth century Bologna was becoming a special centre of this movement. The city now grew famous through the lectures of Irnerius, and the complete codification of the Justinian laws.

Inspired by this scientific treatment of civil law, a monk of Bologna, Gratian by name, codified the edicts of Church Fathers, councils, popes, Christian emperors, thus furnishing the church with a complete and systematic work on canon law. It was called Gratian's "Decrees," and almost at once became the great authority. Thus Bologna had become the Mecca for law-students, who came in large numbers. In 1158, probably because the masters favored his claims, Frederick Barbarossa chartered the institution as a university. It is estimated that by the opening of the thirteenth century there were at least five thousand students in attendance. To a long-established course in the liberal arts and law, medicine was added in 1316 and theology in 1360.

Paris.—The universities arose in mediæval England, France, Germany, and elsewhere, as they did in Italy, but of all attempts north of the Alps that of Paris was first and by far the most famous. This university grew out of the cathedral school of Notre Dame, through the fame of its head, William of Champeaux, early in the twelfth century. His great successor, the brilliant Abelard, who lectured there on dialectic and theology between 1108 and 1139, drew thousands of students to Paris from all nations. Through his talented pupil, Peter the Lombard, Abelard laid the foundations of what in 1180 was formally recognized by Louis VII as a university. In 1200, when law and medicine had been added to theology and the liberal arts, it was **reco**gnized by Philip Augustus.

Rapid Growth.—New universities arose in several ways, sometimes as migrations from an older establishment, as Oxford from Paris, sometimes as new foundations by church or state. In a general way the universities arising in southern Europe, as in Italy, Spain, Portugal, and France, took Bologna as a pattern, while northern Europe, as in England, Scotland, Sweden, Germany, and Denmark, took Paris as a pattern. The difference between the two types of universities will be treated presently. By the close of the fourteenth century about eighty universities had sprung into existence.

Privileges.—The chief reason for this rapid increase in the number of the mediæval universities is to be found in the special privileges granted by emperors, kings, lords, and popes. These privileges extended not only to the masters and the students, but also to their attendants, of which there seems to have been a goodly number, especially in the case of the so-called "wandering" students. In the year 1158, as already stated, Frederick Barbarossa granted charter privileges to the university of Bologna which became a sort of pattern for other monarchs and other universities. According to these provisions persons connected with the universities were generally exempted from military service and taxation. Offenders against the laws were granted trial by courts specially organized. In addition to these general provisions, the power to grant degrees was presently conferred upon the universities, and, when privileges granted by sovereigns were challenged or denied by municipal authorities, the right to move was permitted. Such a migration was comparatively simple, inasmuch as there was nothing to move except the masters and their students. Costly buildings, libraries, etc., had not yet come.

License.—Under the stimulus of these protective privileges the number of students increased rapidly, more masters became necessary, and new foundations were fostered, but, on the other hand, license of all sorts was also fostered. The students—so the evidence shows—indulged in all sorts of vice, including drunkenness, gambling, and licentiousness. Students coming from different countries, or belonging to different classes, provoked each other into ugly quarrels. Fights between "the town and the gown" were not uncommon. When this license produced the "wandering" students, scandalous conduct was the rule. Things became so serious presently that expulsion and even the revocation of university privileges were necessary.

Organization.—The word university, as first used in connection with mediæval education, did not mean an institution in which all the learning of the time was imparted, but rather an association of masters and students whose purpose was study. To this fact reference has been made. When the number of students, due to the reputation of some master, or association of masters, reached large proportions in any seat of learning, the student body naturally grouped itself into "nations." At Bologna, where the students were usually mature men, they constituted the governing body, deciding not only who the masters should be, but also determining the fees, the beginning and the end of sessions, etc. This, as stated, became the pattern of organization for the universities of southern Europe. Each "nation" annually elected a representative, or "counsellor," and to these counsellors as a body the general conduct of the student body was intrusted.

At Paris, and in the universities which patterned after Paris, the student body consisted largely of younger men, and therefore the masters, constituting "faculties," became the governing body. Here the masters elected representatives, called "deans," in whom as a body the administration of affairs was vested.

In course of time it became the custom in the mediæval universities to administer the government through a joint body of "counsellors" and "deans," who in turn agreed upon a central head called "rector," or "chancellor."

Courses of Study.—The fully developed mediæval university offered courses in the liberal arts (philosophy), law, medicine, and theology, which divisions, with many modifications of content, have become the pattern for modern universities. The content of the courses offered by each faculty differed considerably in different constitutions, and to some degree, from time to time, even in the same institution. Aristotle continued to be the great authority in the liberal arts course, Hippocrates and Galen in medicine, Justinian's "Code" and Gratian's "Decrees" in law, and Peter the Lombard in theology. Such studies as history and

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modern languages found no place as yet, little attention was paid to Roman classics, and almost none to Greek.

Methods.—The great purpose of the mediæval university was to train the student to acquire what accepted authorities offered, and to debate successfully on any subject acquired. In order to accomplish the former purpose, the masters lectured in Latin on accepted texts, adding as vast an array of other authorities, for and against, as possible, and supplementing the whole by opinions of their own. In the absence of printed books, and because even enough manuscripts were difficult to supply, much repetition of the text and copious notes were necessary.

In the accomplishment of the second purpose students were required to contend with each other in Latin, singly or in groups, in formal disputations, subject to much rhetorical and logical regulation, and which in the latter Middle Ages degenerated into frivolous contentions for victory rather than for fact and truth. Authority, subtlety of argument, skill in debating amounting to a sort of intellectual fencing these, rather than independent research and love for absolute truth, were the great ideals.

Degrees.—After years of study, lasting from three to seven, the student might hope to win a "degree." Different private and public debates paved the way. Three degrees were possible, corresponding to the custom of the "guilds," where the learner was first an apprentice, then a journeyman, and finally a master. So in the universities, the first or initial degree made the young man a "bachelor," or candidate; the next, which resulted from success in private debates, made him a "master"; and the last, following the public debate, made him a "doctor." In course of time the mastership and doctorate were conferred together, and admitted the graduate into the body of masters, or professors, and permitted him to compete with them in winning students for themselves.

Influence.—While it will be readily admitted that the mediæval universities discouraged freedom both in course and method, it must also be granted, we think, that the process of acquisition made industry and certainty necessary, and that the debating process led to intellectual resourcefulness worthy of attainment.

The institutional value of the mediæval universities can hardly be overestimated. They were a powerful protest against absolutism on the part of the church and the state; for, in the great quarrels between the two, they came to be the recognized courts of arbitration. In short, they paved the way for the later more complete liberation of reason.

REFERENCES

- 1. Myers' "General History."
- 2. Davidson's "History of Education."
- 3. Graves' "History of Education," vol. I.
- 4. Irving's "Mahomet and His Successors."
- 5. Laurie's "Rise of the Universities."
- 6. Guizot's "History of Civilization."
- 7. Azarias' "Essays Educational."

QUESTIONS

I. How did this collision between Christianity and paganism end, and why?

2. Compare the social and moral conditions of the world as

it was before Christ's coming with what they had become through the otherworldliness of the first four centuries of Christian education.

3. How did the church become the sole custodian of education in the sixth century A. D.?

4. Why did the church commit the cause of education almost wholly to monasticism?

5. Explain, by gathering up the contributing causes, what is meant by monasticism.

6. How and through whom did monasticism rise in Egypt? Explain its spread into Greece, Italy, and western Europe.

7. What vows gather up all the aspirations of monasticism? How did St. Benedict make the monasteries the great educational agency of the church?

8. What were the seven liberal arts of the monastic schools? Describe the growth of each in content, and their place in the curriculum.

9. Who attended the monastic schools? Describe the methods of instruction, and the results.

10. What were the parish schools? Describe their function, curriculum, and character.

II. What were the cathedral schools? Why, with some famous exceptions, were they inferior to the Alexandrian cate-chetical school?

12. What were the defects of monasticism as an educational agency? To what great movements did it contribute?

13. Who was Charlemagne? Tell what causes contributed to make him the great champion of Christian civilization. What was his "dream"?

14. Describe in detail the various ways in which Charlemagne promoted education.

15. Describe the educational career of the great spiritual successors of Charlemagne.

16. Who were the Saracens? Who was Mohammed? What was the origin of the Koran, and the "crescent" of the caliphs?

17. How did it become necessary for the Koran to garb itself in Hellenism?

18. What did the Hellenized Saracens contribute to education in Arabia and in Spain? Explain in great detail.

19. What was scholasticism? State the contributing causes that produced this revolt.

20. Tell what you can of the great schoolmen Erigena, Anselm, Abelard, Aquinas, Scotus, Occam.

21. Describe scholasticism as a "method," and its results.

22. Describe the influence of scholasticism on various mediæval conditions.

23. Give the origin and trace the complicating development of feudalism. What were its effects on education?

24. What ideals gathered up the aspirations of feudalism? What was chivalry?

25. What were the Crusades? Account for them, and state how they contributed to education.

26. How did the Crusades produce the knight schools? Describe the education of a knight by periods.

27. What notice did chivalry take of woman? Explain the vast services of chivalry.

28. Why was "commerce" never wholly driven from western Europe? What was the fate of commerce when feudalism spread over Europe?

29. How did the Crusades revive commerce, and how as a result did they produce cities?

30. What were the guild schools, the chantry schools, and the burgher schools? Describe each of these in much detail.

31. What became of Hellenic universities and later of Saracenic universities?

32. Especially through what contributing causes may we account for the rise of the mediæval universities? Explain.

33. Sketch the history of the three earliest mediæval universities. Go into the details.

34. Describe how new universities arose rapidly all over mediæval Europe.

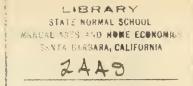
HISTORY OF EDUCATION

35. What privileges were conferred upon them? What were the results?

36. Describe the earlier and final organization of the mediæval universities.

37. Describe the courses, methods, degrees, and influence of the mediæval universities, going into much detail.

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CHAPTER XI

THE RENAISSANCE

The repression and uniformity to which the human spirit had submitted for a thousand years, only under protest, became more and more unbearable until the mind at last burst through these fetters and attained to a very remarkable freedom of activity known as the "Renaissance" (rebirth).

Causes.—A number of things conspired to bring about this movement. The defense which Christian orthodoxy had to make when Saracenic learning crept into the cathedral schools and the monasteries, and produced scholasticism, was probably the first distinct summons to the new mental activity, and, through the recovery of Aristotle's works on physics, it grew to very large dimensions in the universities after the Crusades.

The Crusades, producing chivalry, commerce, cities, wealth, and culture, also contributed powerfully to the same result, inasmuch as all these things made it necessary for the mind to emancipate itself from the narrow limits to which the prevailing otherworldliness and formal orthodoxy had enslaved it.

Spirit of the Renaissance.—The men who were carried into the new-born freedom dared to look at the world around them—at nature—and literally revelled in its beauty. The joys of the present life in all its forms took complete possession. The body was no longer looked upon as a handicap but as a gift. Intellect dared to solve the problems which life and the world present,* and felt the consciousness of power. The familiar individualism of the Greek mind (see chapter on Greek education), wrapped up in selfconscious, self-expressive æstheticism, had reappeared in the world. Beauty in the Greek sense, with free individuality, had once more, regardless of results to the social whole, become objects of worship.

Revival of Learning .- The choice coterie who, covertly defying orthodoxy, had dared to read the Græco-Roman literatures in the monasteries or in the courts, practically all through the Middle Ages, were of course the first to recognize a kinship of human interests. During the fourteenth and fifteenth centuries, accordingly, the study of the "classics" had become the great pursuit of the learned class. And because the Græco-Roman literatures were believed to be the fullest and best description of all that is "human," it became the custom to call these writings the "humanities." For the same reason the enthusiastic study of the classics was called "humanism," and the students themselves "humanists." Humanism, however, did not confine itself simply to the study of the Græco-Roman literatures, but, inspired by the precious models, succeeded in producing a literature of its own rivalling that of the best days of Rome and Athens.

This humanism, which was only the literary phase of the Renaissance, was accompanied by an art revival equally enthusiastic and productive. Before the close of the fifteenth century Italy had produced such painters as Botticelli, Michelangelo, Leonardo da Vinci,

* Adams' "Civilization During the Middle Ages," p. 365.

Andrea del Sarto, Titian, and others, while Spain had produced Velasquez, Flanders Rubens, and Holland Rembrandt. Sculpture was hardly behind painting in rapid productive energy. Progress and discovery had become the marks of the age.

ITALY

This exulting freedom of spirit, which was so characteristic of Græco-Roman life at its best, and into which the world was now reborn, found its first great representatives in Italy.

Special Causes.—There were three or four very special reasons for the early rebirth of learning in Italy. Nearness to the papacy had exposed it to the peril of familiarity and thus weakened its authority over the "intellectuals." The political strife between rival factions within cities, and rivalry between cities themselves for commercial and political supremacy, naturally sharpened the wits of men. For the sake of the prestige which association with "learning" would give them the various "city tyrants" patronized distinguished humanists at the courts and encouraged them to found schools. The Græco-Roman literatures, as before stated, had continued to have devotees in cathedral schools and monasteries.

DANTE

Dante (1265-1321) was born and educated in Florence. His teacher was a famous rhetorician and philosopher, and Dante loved him. He was drawn into the political turmoil of the age and banished. We are not surprised, therefore, that he gave the world his "Inferno," the "Divine Comedy," which has made his name immortal. While the thought of the "Inferno" is mediaval, he gave the Italian language a literary dignity which it has never lost, and thus he became the great Renaissance prophet, the forerunner of freedom in beauty of style.

PETRARCH

The first great humanist was Petrarch (1304–1374). His father was an eminent jurist, banished in the same year as Dante. The family removed to Avignon, France, and Petrarch had all the educational advantages of the splendid institution of Montpelier. His father wanted the boy to devote his life to law, but Petrarch preferred a life of letters, and became the first great humanistic poet.

The great Renan calls Petrarch "the first modern man." Adams says that Petrarch was the very embodiment of the Renaissance spirit.* He emphasized the present life, with its beauty and its joys, and thus turned his back on mediæval otherworldliness. He appealed with all the vigor of new-born individualism from tradition and authority to direct observation and aggressive reason. Even Aristotle suffered at Petrarch's hands, and his impatience with the narrowness and conservatism of the universities is almost heroic.

Carried away by this felt kinship with the ancients he spent the greater part of his life in restoring ancient culture. He did this by collecting and repairing Latin

* "Civilization of the Middle Ages," p. 375.

manuscripts, by productions of his own full of the classic spirit, and by his untiring efforts to inspire others with his own enthusiasm, thus producing famous disciples.

BOCCACCIO

One of these disciples was Boccaccio (1313-1375). As a young man Boccaccio had studied at Naples, and produced tales, romances, and poems that attracted much attention. His greatest work is the "Decameron" (ten-day book), filled with classical allusions and the spirit of the Renaissance. He had become an admirer of Petrarch, but met him for the first time in 1350 when the latter came on a brief visit to Florence, where Boccaccio was then lecturing on Dante, and pursuing his literary labors.

Boccaccio, like Petrarch, served the Renaissance by his untiring efforts to collect. preserve, and copy ancient manuscripts, and by producing numerous works highly classical in spirit.

CHRYSOLORAS

The Greek language had almost disappeared from the Middle Ages, and little was done for it even after Petrarch's advent. Petrarch had studied Greek, but knew so little of it that when a friend sent him" Homer" as a gift, he said: "Thy Homer is dumb to me, while I most certainly am deaf to him. Nevertheless, I am delighted at the very sight of him." He persuaded Boccaccio to translate Homer, and encouraged the study of Greek authors. Thus it was that enthusiastic humanists frequently visited Greece and Constantinople to secure copies of Greek authors.

Chrysoloras.-Greek scholars had gradually begun to come into Italy. In 1396 Manuel Chrysoloras (1350-1415), sent to Venice by the Eastern emperor to implore aid against the Turks, was invited to the professorship of Greek which through the influence of Boccaccio had been established at Florence. Young Italians, even in Venice, and now in Florence, literally besieged him in their eagerness to learn. Greek. He remained in Italy sixteen years, making Florence the new seat of Greek learning, though he spent some of his time founding schools at Pavia, Venice, Milan, Padua, and Rome. Apart from his great work as a teacher, who produced famous disciples and in turn founded schools, his best contributions to the Renaissance were a series of translations of Greek authors, and a work on Greek grammar which long remained the one available authority. Perhaps the most noteworthy disciple of Chrysoloras was "Vittorino da Feltre."

VITTORINO DA FELTRE

Vittorino (1378–1446) took his degree at Padua, where he had become a fine Latin scholar, and remained to take a postgraduate course in mathematics under private masters. He became a teacher here, but after twenty years of hard work went to Venice to study Greek under a great master.

On his return to Padua he began to teach in his own house. When he was forty-five years old, the Marquis of Mantua, who hoped to add lustre to his court, persuaded Vittorino to become the court teacher. The marquis granted every wish, and gave him a suitable building called the "pleasure house." Vittorino and

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the princes who were his pupils lived in the school, but, at his request, the sons of his friends and other promising young men were received into the school.

Departing somewhat from the defiant freedom of the earlier humanists, he aimed at a harmonious development of mind, body, and morals. He used as means to ends not only the Latin and Greek classics, but also the Church Fathers, and even the liberal arts, giving the arts large content. Outdoor life and games were encouraged as part of the curriculum.

The scarcity of books compelled him to resort much to dictation as a method of teaching, but, due to his resourceful personality he produced very praiseworthy results, and became the model for other schools.

Highest Points.—In the year 1453, when the capture of Constantinople by the Turks drove the Greek scholars into exile, they were received with open arms into Italy, where such patrons as Nicholas V (1398– 1455) and Leo X (1475–1521) made it possible to carry on the work of the Renaissance with an enthusiasm that amounted to abandonment. Nicholas V encouraged the humanists to collect manuscripts and founded the Vatican library for their permanent storage, while Leo X (1513–1521) by and by encouraged artists like Michelangelo.

Influence.—The court schools produced by Italian humanism, through their excellency in course and spirit, became competitors of the universities and at length compelled them to give a large place to the classical literatures of the Greeks and Romans. This was particularly true toward the close of the fifteenth century in Florence, Padua, Pavia, Milan, Ferrara, and Rome.

While some of the Italians, conspicuous among them Vittorino, endeavored to use the ancient learning, in connection with the Christian writers, as means in moral education, and while others, like the learned itinerant philosopher Valla, for a short time a pupil of Vittorino, repudiated the church and her formal confessions openly, the great majority of the "learned" class, including Nicholas V, pagan and sceptical as they had become, remained in outward connection with the church, and even attained to the highest places in the gift of the church. Probably the most extreme case of paganistic humanism among "churchmen" was that of Peter Bembo (1470-1547), the literary ruler at the brilliant court of Leo X, who, himself a pope, was still at heart what his father, Lorenzo the Magnificent, of the house of Medici, had been in his love for art, literature, and paganism, a veritable pagan.

In its best representatives Italian humanism had risen to the highest purpose of complete human development, through a broad course in the study of the classics, supplemented by the Church Fathers, mathematics, science, music, and physical culture; and, by adaptation of work to the pupil's interest and ability, discipline went so far as to banish the rod. Toward the close of the fifteenth century, however, Italian humanism degenerated into dead formalism, later called "Ciceronianism," consisting chiefly in the study of formal grammar and style instead of content and moral purpose. In short, Italian humanism defeated its own highest possibilities, which were, however, later realized more fully north of the Alps.

NORTH OF THE ALPS

The Renaissance did not expend all its force in Italy, but spread into France, Germany, England, and elsewhere, and was greatly modified.

Causes.—Wandering scholars first carried the Renaissance north of the Alps, thus paving the way for a larger coming when Gutenberg's invention of printing with movable type (1456) spread through Europe, making the multiplication of all texts rapid and continuous. Toward the close of the fifteenth century, as the movement gained momentum, humanistic scholars were invited north in great numbers, and admirers of the new learning from the north became students at Florence and other Italian centres of humanism.

FRANCE

It was only natural that France, so long the centre of intellectual activity, should be interested. As early as 1458 a Greek professorship was established in the University of Paris. The Renaissance movement was greatly aided by the expedition which the French kings, Charles VIII and Louis XII, in the interest of hereditary claims, made into Italy in 1494 and 1498, respectively. Although these expeditions failed in their original purpose, they brought French thinkers into contact with the fascinating movement at such sources as Florence, Naples, Milan, and Rome.

Owing to conservatism, the universities of France refused to follow the lead of Paris and opposed the new learning for some time, but the cause found an influential patron in the young king, Francis I (15151547). Through his support many prominent humanistic scholars appeared as champions of the classics. Among them were the celebrated authors and teachers Budæus and Corderius. The new education was gradually swept into all the better schools of France.

College of Guyenne.—One of the first important humanistic institutions was the college of Guyenne at Bordeaux, where Corderius and learned men like him were members of the faculty.

Latin and religion were the chief studies in a tenyear secondary course. Greek, mathematics, and rhetoric were offered in the upper classes. A two-year course in philosophy, corresponding somewhat to the arts course in the universities, was added, and was devoted chiefly to Aristotle's works on logic and natural science.

The school became very popular through the excellency of its methods of instruction. Grammar, for example, was approached through the mother tongue, "forms" were taught by the "development" method, disputations were used as stimuli, and discipline was mild. We may consider this school a fair sample of many.

GERMANY

Wandering teachers of the classics, visiting higher institutions of learning in the German states, began to leave their impress wherever they went, but the earliest institutional effort to promote the Renaissance movement in Germany, the Netherlands, and perhaps France, was made by the "Brethren of the Common Life."

The Brethren of the Common Life.—In the year 1376, twenty years before Chrysoloras came to Florence, Gerhart Groot had founded a brotherhood of priests at Deventer, Holland, known as the "Brethren of the Common Life," because it was to be their mission to improve the masses by combating ignorance. In honor of their patron saint, Jerome, they have also been called Jeromites, or Hieronymians. These "brethren" took no monastic vows, and could withdraw from the order if they wished to do so, but they lived a very simple life, supporting themselves by copying manuscripts, and devoting all other time at their command to teaching.

They were specially devoted to the "common people," whom they taught free of charge. In some places they served as assistants in schools already in existence; in other places they founded new schools and undertook the whole management. As long as they pursued their original purpose they taught reading, writing, singing, and the mother tongue in connection with the Scriptures, placing the emphasis upon the last two. Their services were very much in demand, and they became so popular that even before they undertook to champion humanism, they had established some forty-five "houses" closely linked together, and extending through the Netherlands, Germany, and France.

When the influence of the Italian Renaissance began to be felt in the northlands, the brethren became ardent advocates. They continued faithful to their original purpose in religion and morals, but added the classics and Hebrew, thus expanding into secondary schools. Rhetoric and theology often found a place in the higher classes, and occasionally the course covered the work of the faculty of arts in a university. In a little more than a quarter of a century after they had taken the Renaissance into their heart, the Hieronymians had established one hundred and fifty institutions, furnishing teachers for other institutions all over Europe.

Influence.—The work of the brethren deepened the impress of Renaissance wanderers, and thus helped to earry the new movement into the northern universities. Erfurt established a chair of classics in 1494, and was soon afterward completely reformed upon a humanistic basis. Other German universities, like Heidelberg, were similarly reformed. New universities, like Wittenberg in 1502, were humanistic from the beginning.

Most of the northern Renaissance leaders were products of early training received in the schools of the brethren. Perhaps this was largely due to the wonderful personality and teaching power of Wessel (1420-1489), the first important champion of the new learning in the schools of the brethren. Among pupils who became famous humanists were Agricola, Reuchlin, and Erasmus.

AGRICOLA

The first German humanist of great importance was Agricola (1443-1485).

Agricola.—Although best known by this name, his real name was Hussman (farmer), but, obedient to the custom of the times, he had translated it into Latin.

For a time he was a pupil of Thomas a Kempis, then he attended the University of Louvain for two years, and at Paris he came under the influence of Wessel, the great Hieronymian. Then he went to Italy to avail himself of the splendid opportunities of several famous institutions. When he returned to his own people he was the embodiment of all the best influences of the Renaissance, and his reputation for scholarship and eloquence was so great that both courts and cities vied with each other to secure his services.

Through the persuasions of his friend Dalberg, Bishop of Worms, he established himself at Heidelberg, where he divided his time between private studying and public lecturing. His knowledge of Greek and Latin were marvellous. He understood French and Italian, and at the age of forty-one he began to study Hebrew in order that he might read the Old Testament.

So great was his devotion to the cause of learning that he would not consent to accept a position as head of a school in Antwerp, even when the offer was pressed upon him. In declining the offer he gave the Antwerp school authorities a piece of advice which still lives, telling them in effect that a real teacher professionally trained is worth getting at any price, however high, and that no amount of training for anything else, even for theology or oratory, can be equivalent to such professional training. He served the cause of humanistic education notably through a treatise on "Rules of Study," in which he exhibits much pedagogical insight.

REUCHLIN

Reuchlin.—Like his friend Agricola, Reuchlin (1455– 1522) caught the spirit of Wessel. He studied at Paris, where he went at the age of eighteen. He continued his classical studies at Basel, where he took his degree. In 1498 he was sent to Rome on some important mission, and while there devoted all his spare time to the study of Hebrew under a learned Jew, and to the collection of Greek and Hebrew manuscripts.

He served the cause of humanism as professor of Latin and Greek at Basel, and also of Hebrew at Tübingen, and for a short time at Heidelberg. He wrote a Latin lexicon, published fine editions of the Greek classics, and in 1506, in the interests of true Christianity, as he wrote to his friend Cardinal Hadrian, he published a Hebrew grammar and lexicon, the first work of the kind in Germany. He was very proud of this achievement, calling it a "monument more enduring than bronze," and his friends Erasmus and Luther praised and admired these wonderful contributions to the cause of Christian theology.

Controversy .- While at Heidelberg, Reuchlin was unfortunate enough to become involved in a bitter controversy that covered nine or ten years. In 1510 a baptized rabbi, Pfefferkorn by name, to pave the way for the conversion of his race, urged Emperor Maximilian to destroy all Hebrew books except the Bible. On account of his reputation for Hebrew scholarship the matter was now referred to Reuchlin, who promptly advised that only such books as were written against Christianity should be destroyed, and added that "the best way to convert the Israelites would be to establish two professors of the Hebrew language in each university, who should teach the theologians to read the Bible in Hebrew, and thus refute the Jewish doctors." This very reasonable advice offended the Dominican friars of Cologne, and they attacked Reuchlin with great bitterness, and the controversy became general, until finally the pope, to

whom the problem was referred, decided in favor of Reuchlin. The leading thinkers of the age, Erasmus among them, sided with Reuchlin and recognized the splendid service which this learned humanist had rendered religion and truth. He had, in fact, paved the way for Luther.

ERASMUS

The most brilliant humanist of the age was Erasmus (1467-1536), a Hollander.

Erasmus .- Like Agricola and Reuchlin, Erasmus had caught the spirit of all that was best in the Renaissance from the Hieronymians. Like the German Melanchthon after him, he was very precocious. Agricola, on a visit to Deventer, saw him there at the age of eight, and prophesied his future greatness. He lost his parents when still a youth, and his guardians, in order to get possession of his patrimony, persuaded him to become a monk of the Augustinian order, but finding that he was wholly out of sympathy with monasticism, he refused to submit to the decisions of his guardians, and presently, to his great relief, was released from his vows by the Bishop of Cambrai, and sent to the University of Paris. Here, as he said, he gave up his "whole soul to Greek learning," the elements of which he had acquired by private study. He wanted to "buy Greek books," and then "some clothes," but because his allowance was small, he took pupils in Greek. In 1509, while still at Paris, he met some Greek students who induced him to visit Oxford. Here he became acquainted with Colet and More, and studied under Grocyn and Linacre. He was so delighted with the learning of his Oxford friends, especially

with the scholarship of Linacre, that he concluded it was not necessary to go to Italy to study Greek, but presently, when poverty no longer pinched so hard, he undertook to visit the ancient libraries, meet men whom he admired, and pursue his favorite study of Greek at Venice, Florence, and other centres.

In 1510 Erasmus became the professor of divinity at Cambridge, where he also taught Greek. He helped Colet establish what later became the famous school of St. Paul's, London, and he undertook to found a college at Louvain, but, when the Reformation and its controversies began, he withdrew into learned retirement at Basel, the home of humanism and printing, and although he could not be persuaded, even by Luther, to speak for the Reformation, he contributed powerfully to its cause by means of his writings—all in Latin.

By means of satires, with innocent titles, he exposed the terrible laxity of faith and morals in church and society, and thus aided the Reformation. In 1516 he published an edition of the New Testament, accompanied by a Latin translation and notes, that gave learned Europe the gospel as it was preached by Christ and his apostles, thus serving the cause of the Reformation directly through his expert knowledge of the Greek language.

The man who had thus called attention to the real content, or thought, of the Scriptures, also called attention to the content, or thought, of Cicero as a writer, emphasizing this content above style, no matter how inimitable and excellent the latter might be. He advised the "Ciceronians," as his imitators were then beginning to be called, to correlate the study of "na-

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ture" and "history" with the study of the classics, as means to ends.

He contributed valuable works on the various phases of general education, proposing courses of study that made for piety, learning, moral uplift, and good manners, teachers selected for their personal worth and professional fitness, methods of study whose merits have stood the test of later pedagogy, discipline based on love and common sense rather than on force, and the education of girls in wholesome and natural environment rather than in convents. Indeed, if the same subjects had not since then been treated in still fuller harmony with the dictates of modern psychology and Christian idealism, we should hardly find it necessary to look elsewhere than to Erasmus for our professional training as teachers.

ENGLAND

The earliest patron of humanism in England was Humphrey, Duke of Gloucester. Through his efforts younger humanists were brought from Italy to translate the classics, and Italian masters who would not come north were remunerated for help rendered. He also managed to give Greek and Latin books and manuscripts to Oxford, where he himself had been a student.

Oxford.—As a result of Humphrey's endeavors, Oxford students began to visit Italy by the middle of the fifteenth century, but near its close (1488) three Oxford men, Grocyn, Linacre, and Latimer, devoted friends, went to Florence to study Greek, and returned to England determined to introduce Greek in their homeland. How much this determination was due to the religious ideas of Savonarola. the atmosphere of whose spirit filled Florence at the time, we do not know.

Grocyn.—Grocyn (1442-1519) was fortunate enough to become the first lecturer on Greek at Oxford, where he found Duke Humphrey's contribution of books most helpful. Grocyn also began to ally Greek with the study of the Bible and thus was a forerunner of the larger movement that resulted in the Reformation.

Linacre.—Linacre (1460-1524) who, like Grocyn, had given much attention to the classics, rhetoric, and logic, while in Italy, became interested in Aristotle, and thus concluded to take a course in natural science and medicine at Padua, where he also lectured. On his return to England he lectured on medicine at Oxford, but gave some of his time to teaching Latin and Greek, and helped Grocyn train Erasmus, More, and Colet. Erasmus, as noted, could not praise him enough.

Cambridge.—Bishop Fisher, who had become Chancellor, encouraged Erasmus, professor of divinity (1510-1514), to lecture on Greek just as "a labor of love." In 1514 Sir John Cheke succeeded to a new professorship of Greek in the university. Like Grocyn at Oxford, he allied Greek with the interpretation of the New Testament, and was especially interested in Matthew's Gospel.

Roger Ascham succeeded Cheke in 1515, when the latter became tutor to Prince Edward. Four years later Ascham became tutor in Greek and Latin to Princess Elizabeth. In his "Scholemaster," written to prove that the cruel discipline then prevalent could be cured by better teaching, Ascham offered the method of "double translation" in the study of the classics. According to this plan the student was to translate his Latin lesson into English, and an hour later back into Latin, which was then to be compared by the master with the original.

Henry VIII, through the influence of More and Wolsey, became the first patron of humanism at the court.

Probably the most far-reaching impulse was given to humanism in English, and thus to American education, by Dean Colet of St. Paul's Cathedral. The school which he established allied the classics with religion and morals, and became the type of similar schools into which the Reformation converted numerous monasteries, as well as of new foundations.

Influence.—In the north, as we have seen, the Renaissance lost its extreme individualism and became the most active ally of religious reform and moral uplift, and thus contributed powerfully to the Reformation of the sixteenth century.

Unfortunately, as we shall discover, this northern humanism became as despotic in content and as mechanical in method as scholasticism before it, and thus had to be reformed itself in course of time.

REFERENCES

- I. Myers' "General History."
- 2. Lord's "Beacon Lights of History."
- 3. Adams' "Civilization of the Middle Ages."
- 4. Monroe's "Cyclopedia of Education."
- 5. Monroe's "Text-Book in the History of Education."
- 6. Graves' "History of Education," vol. II.
- 7. Parker's "History of Education."
- 8. Reeves' "Petrarch."
- 9. Mrs. Oliphant's "Dante."
- 10. Leclerc's "Life of Erasmus."

QUESTIONS

r. What was the Renaissance? Explain its causes and spirit pretty fully.

2. Distinguish humanism from its associated art revival.

3. Explain the special causes of the revival of learning in Italy.

4. Account for the "making" of Dante, Petrarch, and Boccaccio, and then explain the contributions of each one to the cause of learning.

5. In what favor was Greek held in the Middle Ages? How did it begin to come into favor?

6. How did Chrysoloras become the great missionary of Greek humanism in Italy, and what did he accomplish?

7. Who was Vittorino? Trace his career up to the time when he was called to Mantua. Account for his call, and describe the purpose, courses, methods, and worth of his court school at Mantua.

8. When did the Italian Renaissance reach its high tide? Explain fully.

9. How did the Italian court schools leaven the universities with humanism?

10. What were the relations between Italian humanism and Christian faith? Illustrate.

11. From what high organic perfections to what mechanical leanness did Italian humanism finally sink?

12. Account for the spread of humanism north of the Alps.

13. How early did Paris become interested in the Renaissance? Describe the services which French kings rendered to the cause.

14. Describe the work and influence of the college of Guyenne.

15. Account for the arrival of humanism in Germany.

16. What was the origin of the "Brethren of the Common Life," and their work before they became the champions of humanism?

17. Describe the course which they offered afterward, together with their great success. What was their effect on the universities of Germany? What great leaders did they produce?

18. Account for "the making" of Agricola, and his call to Antwerp. What was the outcome? What was the worth of his advice? 19. Account for the making of Reuchlin, and describe the vast services which he rendered the cause of education, not overlooking the result of his controversy.

20. Account for the making of Erasmus, describe his varied career, and the great services which he rendered to the cause of the Reformation and education.

21. Account for the arrival of humanism in England. Explain the connections of Grocyn and Linacre with Oxford, and place some estimate upon the value of their services.

22. How did humanism reach Cambridge, and through whom was it promoted there?

23. Describe the part played by Cheke, Ascham, Colet, and Henry VIII in the history of education.

24. Place some value on northern humanism, and follow it to its decline.

PART III

THE REFORMATION

CHAPTER XII

THE REFORMATION

Modifying impulses attached themselves to the Renaissance north of the Alps, and helped to produce the Reformation.

Causes.—Northern temper, with its religious and moral impulses, induced the northern humanists to use the knowledge of the dead languages, rather than Aristotelian logic, in the interpretation of the Holy Scriptures. In this way these scholarly humanists, especially in the University of Paris, long the centre of theological study, but elsewhere also, presently discovered what to them looked like unpardonable inconsistencies in the life of the clergy and people, and in the traditions of the church as an institution. This feeling, as we have seen, was conspicuously true of men like Erasmus, who, without a thought of revolt from the church, worked earnestly for reform from within.

The French Waldenses, the English Wycliffites, and the Bohemian Hussites had really arrived at similar conclusions of protest long before the humanists. Political and social conditions, together with the arrival on the scene of men like Luther, men of profound convictions and heroic cast, hastened the crisis.

The daring freedom of thought, so characteristic of

the Renaissance from the very beginning, and present in all these discoveries of error and evil in the church, developed at length, in the sixteenth century, into open protest and revolution—the Reformation had fully come.

Nature .-- In its most exalted aspects the Reformation was the Renaissance ennobled by religious and moral impulse. These impulses rescued individualism from the paganistic nature-worship and self-indulgence with which it was bound up so largely in Italy, and to which Vittorino da Feltre was so notable an exception. In the Reformation human reason became still more aggressive than in humanism, growing more fully conscious of its power to solve some of the greatest problems of life-life here and life hereafter. The conviction that the soul is responsible to God and man for the use which it makes of reason in the solution of these problems allied itself with intense resentment against all institutional repression and all traditions, whether in church or state, which tended to hinder freedom of thought or freedom of action. This aggressiveness, however, did not prevent reason from submitting with profound reverence to the Holy Scriptures, rather than to the decrees of councils or the edicts of popes, as a final court of appeal in matters of faith and life, and it went so far as to make, not the church, but the individual, responsible for the interpretation of the Holy Scriptures. To this end the Bible was to be given to the masses in the languages which they speak, and this task was greatly facilitated by the activity of the printing-press.

Influence.—In thus exalting the intrinsic worth of the individual—his right to think for himself in matters

of salvation and morality—his personal responsibility to the future as well as to the present—the Reformation "opened a door" which, although Protestantism has not always kept open more effectively than Catholicism, can never again be completely closed. As means to ends, education became the powerful essential of the whole movement, and the heir of all its values.

LUTHER

The first great character of the Reformation was Martin Luther (1483-1546). In him all the ennobling impulses and aspirations which produced the movement found their greatest exponent.*

In the Making .- Luther, born at Eisleben, was the son of a Saxon German, a poor miner. "He was brought up in an atmosphere of deeply earnest but austere piety. His early school-days at Mansfield were darkened by harsh discipline and cruel methods of instruction. Destined to a learned career, he was sent, at the age of fourteen, to the school at Magdeburg conducted by the Brethren of the Common Life, and a year later he was removed to the school at Eisenach, presided over by John Trebonlus, a learned hu-manist and celebrated teacher. Quick of comprehension and gifted in oratory, he excelled all his fellow pupils. He continued his studies, which included logic, rhetoric, physics, and the ancient languages, at the University of Erfurt, and broadened his culture still further by extensive reading, especially in the scholastic philosophy. It was in the library of the university that Luther one day discovered a Bible, a

* Carlyle's "Heroes and Hero Worship," pp. 195–196.

copy of which, though in his twentieth year, he had never seen."*

A deep sense of sin, due in part to native temper. but certainly also to his bringing up and the influence of the "Brethren," together with the tragic loss of his friend Alexis at the Erfurt gate, induced him, contrary to the wishes of his father, who hoped he would study law, to enter the cloister of the Augustinian monks at Erfurt. Here, in order to find the soulpeace for which he longed so profoundly, but which his religion of works and penances had failed to bring him, "he studied the Bible with such energy and success that he could at once refer to any passage in it." His soul-agony drove him ever deeper into the very heart of the Holy Scriptures, until, at length, in his conclusion, based upon his study, and the counsels of a pious friend, that salvation comes not by works which man can do, but by the grace of God in Christ. he found the peace of soul which he sought.

This belief in justification by faith, with all its logical corollaries, made it a matter of conscience, no less than of reason, even if it required heroic courage, to protest against all doctrines and practices of the church that were out of harmony with such faith, and which he therefore blamed for the shameful spiritual laxity of his age. Taking the writings of Augustine as a basis, he organized his conclusions into a logical system, which he began to teach and defend with great vigor. He was now (1508) appointed professor of theology in the newly founded University of Wittenberg, where, in order to prove his positions, he attacked Aristotle

* Painter's "Luther on Education," chap. V.

and the schoolmen with great power, appealing to primitive Christianity and the right of free thought.

The climax in the making of the great reformer was approaching. Several events hastened the crisis. Among them was a commissioned journey to Rome which opened his eyes to conditions that fairly staggered him. An official visitation to Meissen and Thuringia added to his grief. Finally, when Tetzel invaded his parish with his "indulgences" the cup of Luther's woe was full, and he nailed the memorable "ninety-five theses" on the door of the castle church at Wittenberg, and thus (1517) challenged the learned class, in the usual way, to a great debate. The "die was cast," and after his contest with Eck, Luther found himself irrévocably committed against the church as custodian of the Holy Book, and thus became the champion of the "open Bible," which he loved because it brought him peace, and he wished mankind to find what he had found.

Luther's Services to Education.—Luther saw, as we see to-day, that an open Bible would conserve the rights of the individual to think for himself in those matters which are of the highest personal importance, and that superior reason and superior conscience, touched by the divine in this open book, would adjust all essential claims of the individual, not only with the just demands of the social whole, but also with the claims of God, placing God's claims above all others in these adjustments.

Paganism, being without a "revelation," had never succeeded in making these adjustments; and the Christian Church, in her zeal to curb the extreme individualism of Græco-Roman paganism, had gradually, on becoming the sole custodian of education (529), arrogated to herself all rights of interpretation. She accomplished this by refusing to give the Bible to the laity in living languages, thus compelling both reason and conscience to submit to prescriptions, until she had defeated the very ends of Christ's coming. Luther, catching the Master's spirit anew, was the first to rebel against these prescriptions successfully, and, by giving the people the open book, and thus adjusting all rightful claims to each other, he ushered in the modern ages.

Luther hoped to accomplish his educational ideals through a reorganized church and state, co-operating with each other and with the home. All his educational activities and ideas command profound attention, and serve as ideals to-day.

Writings.—Luther frequently referred to education from the pulpit, in his letters, and in his addresses, but the contributions which give him such a high rank as an educator are his translation of the Bible, his catechisms, his appeal to the cities, and his sermon on the duty of sending children to school.

He translated the New Testament into German at Wartburg, where in 1521, after his memorable trial at Worms, powerful friends secreted him for his personal safety; and he completed his translation of the Bible in 1534. He did this to get it before the masses, using their simple and expressive vocabulary with such marvellous selection and correctness of expression that, in a few years—thanks to the printing-press nearly half a million copies were in circulation, and this in spite of the fact that there were other German translations extant. Here was an educational, as well as literary, achievement, whose worth can hardly be overestimated. It produced the common schools of Germany, for if the masses are to read the Bible, and thus think for themselves, they must of course learn to read, and Luther soon persuaded the Protestant congregations and princes to establish such schools. That this purpose was in his mind in the translation of the Bible appears from the fact that his friend and admirer, John Bugenhagen (1485–1558), who reorganized the churches in the cities and the states of northern Germany, ordered, as early as 1520, as at Hamburg, in every parish, not only a Latin school, but also a German school for boys and one for girls.

In 1524 Luther wrote his celebrated "Letter to the Mayors and Aldermen of All Cities in Behalf of Christian Schools." It bore fruit at once, for the following year he was commissioned by the Count of Mansfield to found a model German school at Eisleben. This was done by Luther's coworker, Melanchthon. It was out of these separate foundations by churches and rulers that the present "Volksschulen" of Germany developed in course of time.

In his parish visitations Luther found the people exceedingly ignorant, and therefore in 1529, to bring Bible study within the scope of their understanding, and to help them interpret it when he should translate it, he produced two German catechisms, one for children and the other for adults, thus in effect organizing the home into a catechetical school and furnishing the schools a suitable summary of religious instruction.

In 1535, the year after he had completed his translation of the Bible, he wrote his celebrated "Sermon on the Duty of Sending Children to School." This production, like his "Letter to the Mayors," is an extended treatise on education, in which he touched with a master-hand on practically all the great subjects of school organization, educational purposes, suitable courses, teachers, methods, discipline.

Ideas.—Experience had early convinced Luther, as in harmony with all we know about the man we might have expected, that education based on the Bible was the surest safeguard of the high and holy interests of the home, the church, and the state, and, inasmuch as they were all beneficiaries, they were to be jointly held responsible for the establishment and maintenance of schools, together with the training and employment of teachers. On this point he said: "Even if there were no soul, and men did not need schools . . . for the sake of Christianity, . . . society, for the maintenance of civil order and the proper regulation of the household, needs accomplished and well-trained men and women."

Luther saw, as we do to-day, how greatly the welfare of church and state depends upon our homes. Accordingly he advocated that education should begin at home through elementary instruction in the catechism, which instruction by the parents he had made possible, and for which he held them sacredly responsible. On this point he says: "No one should become a father unless he is able to instruct his children in the Ten Commandments and the Gospel." He loved music, and encouraged the singing of hymns in the home circle.

Recognizing that most parents, much as they might wish to serve the church and state, were not in position to do so, especially since they were not professionally trained, he proposed German schools for both boys and girls, where, as we have seen at Hamburg and Eisleben, in connection with instruction in the catechism, other studies such as singing, reading, writing, arithmetic, history, physical culture, and even "nature" should be taken up under trained teachers. "We see indeed how it goes with this teaching and training," said he in a passage addressed to parents who thought they could teach their own sons and daughters.

While Luther did not advocate long school hours, seeing that these might encroach too seriously upon the home life and occupational pursuits, he was so thoroughly convinced about the importance of education to both church and state that he insisted on compulsory attendance. He said: "If the government can compel such citizens as are fit for military services . . . to perform martial duties," it ought "to compel the people to send their children to school, because in this case we are warring with the devil," and because "Those that enjoy the privileges of a country are to contribute toward everything that the common interests of the country require."

Luther esteemed the office of teaching very highly, asserting that if he were not a minister of the gospel he would like to be a teacher, and calling attention to the fact that in many respects the teacher has the advantage, seeing that children can be shaped for good while adults are often past shaping. "It is hard," said he, "to make old dogs docile and old rogues pious, yet that is what the ministry works at; but young trees, though some may break in pieces, are more easily bent and trained."

To Luther the personality and professional equipment

of the teacher were things of inestimable value. Such a teacher, said he, "can never be sufficiently recompensed." He was particularly concerned about the happiness of school children, and while, because education is so important to the home, the church, and the state, he insisted on "thoroughness," "he sought to adapt instruction to the capacity of children, to make learning pleasant, to awaken mind through skilful questioning, to study things as well as words, and to temper discipline with love." *

In addition to the German schools, meant for "the people," Luther advocated a more academic course for "the brightest pupils, who give promise of becoming teachers, preachers, and workers." These high schools, as we might call them, true to the humanistic spirit of the age, were to be conducted in Latin, and the curriculum was to include civics, gymnastics, and mathematics for the state, as well as "nature," history, music, and the Scriptures for the sake of the church.

Nor was Luther in any way insensible to the direct service of humanism to the Reformation, for he saw that the "dead languages" constituted an indispensable key to the thorough study of the Scriptures and the Church Fathers, not to speak of their worth to other great professions, such as the law and medicine, and therefore proposed that for leadership in both church and state, universities must be maintained, and that the curriculum should include the highest possible training in philosophy as the handmaid of theology. Nevertheless, he realized that when reason and faith seem to conflict, the Holy Scriptures, rather than reason

*Luther's "Letter to the Mayors" and "Sermon on the Duty of Sending Children to School." in the scholastic sense, must be the final court of appeal. This, as we recall, was the attitude which he assumed in his famous trial at Worms, and from which position he never swerved.

Luther was fully "modern" in his advocacy of "libraries," where, for the preservation of "learning," and for purposes of correlation with institutional education, as well as for general information, not only the Bible in the original languages should be accessible, but where the necessary commentaries, together with general reference works, and literary masters, should be placed. Pressed to their full import, these recommendations looked forward to modern public libraries.

Estimate.—We are told that Luther at times used intemperate language and resorted to severity. This was no doubt true, nor should we be surprised. The sin and shame of his age was enough to provoke a saint to righteous wrath, and the opposition which "principalities and powers," of whom better things were to be expected, brought to bear upon him on account of the advanced views which he championed, were enough to unman a superman.

In his riper years, due to the Peasants' War and other excesses committed by some of his followers, he receded from the extreme Renaissance position which he had taken on the question of "individual reason," for he recognized, as we do to-day, that even superior individuality may err irreparably.

The services which Luther and his noble contemporaries rendered to the cause of human freedom in religion and morality, in science and philosophy, as well as in social and civic life, may not prevent future perils, as, alas, it has not done completely even in the house of its birth, but the abject serfdom from which they rescued liberty will probably never again become possible.

MELANCHTHON

The one man through whom, next to Luther, the Reformation of the sixteenth century contributed most directly to education was Philip Melanchthon (1497-1560).

In the Making.—Philip Schwarzerd (black earth), known best by his humanistic Greek name "Melanchthon," was the son of an armorer, and was born at Bretten, in Baden, Germany. At the age of ten he was left an orphan, whereupon his grandmother, a sister of Reuchlin, took him. The great German humanist liked the boy very much, and encouraged him in his studies. Thus he was able to enter college. He was graduated from Heidelberg University at the age of fifteen, and soon afterward became tutor to the son of a German count, but continued his studies, especially Greek, so industriously at Tübingen, where he first came upon Erasmus's edition of the Greek Testament, that in 1514, when only seventeen years old, he was given the degree of "Master of Arts." He now began to lecture on Cicero, Terence, and Greek grammar, but devoted himself with great power to the further study of humanism, together with theology, jurisprudence, and medicine. His lectures began to attract much attention, and in 1518, when only twenty-one years old, he was called to the University of Wittenberg, through Reuchlin's influence, as professor of Greek. Melanchthon's inaugural address made a wonderful impression. Luther, who was then professor of philosophy, and to whom the young professor had been introduced, now forgot that the new professor was so youthful and so small of stature, and, captivated by his learning and his eloquence, took him right into his heart. The great Erasmus was as much pleased as Luther. From that time on Melanchthon became the "ally of Luther" and the "Præceptor Germaniæ."

Educational Services.—Melanchthon would without doubt have contributed much to higher education by his own initiative, but as coworker and complement of Luther he helped to make Wittenberg an educational centre from which radiated influence that may touch the ends of the world and the ends of time.

As Professor.—Melanchthon was deeply interested in the personal welfare of students. "He welcomed them to his home and gave them individual encouragement and aid." He even went so far as to open a private school for the special benefit of students who came to Wittenberg without adequate preparation. In this preparatory school he gave the ancient languages his special attention, but also offered courses in geography, history, and mathematics.

Attracted by his learning, eloquence, and charming personality, thousands of students, from all parts of Europe, came to Wittenberg to hear his lectures on the gospel and the ancient learning. He remained at Wittenberg forty-two years, and thus the time came when there was scarcely a school of any importance in Germany that did not number one or more of his pupils among its teachers. The most distinguished teachers of the age, like Neander and Trotzendorf, were his pupils, or like Sturm, drew upon him for counsel. In 1536, through his influence, the university was remodelled so as to embody the best fruits of humanism and the Reformation, and the new universities which sprang up in Europe presently, followed the lead of Wittenberg. Thus it came about that "when a prince needed a professor for his university, or a city a rector for its schools, Melanchthon was consulted," and one of his pupils selected for the place.

As Writer of Books .- Melanchthon began his career as a writer at Tübingen, where at the age of nineteen he published an edition of Terence, and soon afterward a Greek grammar that attracted much attention, and in 1522 a Latin grammar that was used very extensively. He wrote admirable text-books on rhetoric, logic, ethics, and other subjects, and published charming editions of the Greek and Latin classics. His two immortal works were the "Loci Communes," in which (1521) he gave the theology of the Reformation its first systematic expression, and the "Saxony School Plan," in which (1528) he gave the composite educational idealism resulting from the fusion of the Reformation with the Renaissance its first and powerfully effective expression. To this book we must pay our special respects.

It will be remembered that in 1525 Melanchthon, through Luther's influence, and the Count of Mansfield's behest, organized a school for the boys and girls of Eisleben. In the same spirit the Elector of Saxony requested Melanchthon in 1528 to organize the schools of the state of Saxony. After visiting the schools of Saxony, to learn what reforms were necessary, he formulated a "plan" which provided every town and village of Saxony with a school in which all instruction should be given in Latin. To correct the

wretched pedagogy which he found to be so prevalent, he reduced the number of studies and books, and organized the pupils into three grades. In the first grade reading, writing, and singing should be taught in connection with religion. In the second grade Latin grammar and Latin authors should be taught in connection with more advanced instruction in religion and singing. The third grade should master Latin grammar, in connection with difficult Latin authors, adding rhetoric and logic. Only teachers of character, professionally qualified for the work, were to be tolerated. It will be seen that this "Saxony School Plan" was really a high-school plan, and that Melanchthon in formulating it was controlled by humanism and the Reformation, fused into three ideals, namely, the desire to know what the ancients knew, the desire to speak their languages with skill, or eloquence, and the desire to be pious. This Saxony plan for town and village schools was widely copied, and, although greatly enriched in content, produced the "gymnasiums," or secondary schools, of Germany, France, England, America. Sturm and other great teachers in Germany, Calvin at Geneva, Ascham in England, together with the Jesuits in Catholic Europe, gave these Latin high schools a very complete development. Somewhat modified in the course of centuries, they survive as the solid "middle" of education all through the world.

As an Adviser.—Just as Luther was a mighty impetus to education for the masses, so Melanchthon was to higher education. His reputation for learning, the zeal with which he applied himself to its diffusion as a college professor and writer, together with the fact that in the "Saxony School Plan" he had given successful expression to the desires of the age as it was produced by humanism fused with the Reformation, appealed powerfully to the rulers and cities of Germany, waking up in them the desire for secondary education and attracting them irresistibly to him for advice and assistance. Some fifty cities, as we know from correspondence on record, asked him for assistance in founding Latin schools, like those of Saxony, so that he is justly called the "father" of the German secondary schools, though Sturm after him gave them greater content and better correlation. "In many cases he wrote the basis of organization, laid out the course of study, and nominated the principal instructors. The gymnasial course of instruction recommended by Melanchthon, which included Latin, Greek, Hebrew, rhetoric, logic, mathematics, and cosmology, remained essentially unchanged in Germany till the beginning of the nineteenth century."*

Melanchthon's influence on German universities as institutions, as well as on the courses of instruction offered, entitles him still more completely to the title of "preceptor of Germany." It was he who "prepared the statutes by which the faculty of the University of Wittenberg was reorganized" to fuse higher humanism with the Reformation. Tübingen, Leipzig, and Heidelberg adopted his plans of reorganization, and so did the new universities, Königsberg, founded 1544, and Jena, founded 1548.

* Painter.

OTHER REFORMERS

The other great religious reformers of the sixteenth century who made the extension of educational facilities a part of their reforms were Zwingli, Calvin, and Knox.

ZWINGLI

The celebrated Swiss reformer Ulrich Zwingli (1484-1531) was a contemporary of Luther. He was the son of an influential citizen of Wildhaus, who was able to give him a fine education. He studied philosophy and theology, and, through the influence of Erasmus, became deeply interested in the Holy Scriptures, and their interpretation through the languages, thus arriving at conclusions very like those of the German reformers. In 1519 he became the cathedral preacher at Zurich, where, like Luther, under conditions almost the same, he introduced the Reformation, and with it those educational facilities for which such reformation called.

"He founded a number of humanistic institutions and introduced elementary schools into Switzerland. In 1523 he published in Latin his 'Brief Treatise on the Christian Education of Youth,' which he translated into the Swiss dialect the following year," the year in which Luther addressed his celebrated "Letter to the Mayors of the German Cities." As a religious reformer Zwingli gave religious instruction, including singing, the foremost place in this treatise; advocated the study of "nature" in connection with the Scriptures; looked with much favor upon Hebrew and Greek as means in higher education; and was eminently practical when, with his rugged country in mind, he recommended not only arithmetic and surveying, but also physical culture of a high order and a trade. In all these recommendations Zwingli reminds us powerfully of Luther.

Zwingli was slain in the battle of Cappel in the prime of life, and his movement, full of promise, was merged into that of Calvin.

CALVIN

John Calvin (Jean Caulvin, or Cauvin) was born in Picardy, France, in 1509, and died at Geneva, Switzerland, 1564. Though of humble origin, he had a good and beautiful mother, and a father who was very ambitious for the boy. It was the father's wish that his promising "Jean" should be a priest, and so, after a thorough preparation by Corderius, the famous humanist under whom he began to study grammar at the age of fourteen, he was sent to Paris, and later to Montaign, where a learned Spaniard taught him logic. In the meantime his father, perhaps because he had come to see that the boy had a "legal" mind, had him take a course in law at Orleans. Here Wolmar, the German professor under whom he found time to study Greek, influenced him powerfully in favor of the "new faith" with which the boy's kinsman, Olivetan, who was the first to translate the Bible into French, had imbued him. We are not surprised, therefore, that when his father died, he returned to Paris to study theology, which was his greater passionespecially now that a "bright light," as he said, had come into his life.

But young Calvin was unconsciously approaching

another crisis. In 1533, when he was only twentyfour years old, a friend of his, Nicholas Cop, had been elected to the rectorship of the University of Paris. At Cop's request, Calvin prepared for him an inaugural address, which was to all intents a defense of the Reformation. For this attempt he was obliged to flee from Paris, and found his way to Basel, Switzerland, where, in 1535, only twenty-six years old, he published his famous "Institutes," a powerful work on theology, whose foundation-thought was the sovereignty of God.

On his return from a secret visit to Picardy he stopped at Geneva for the night. Here, where the people had just wrested all power from the Duke of Savoy, the Reformation was producing an ecclesiastical revolution. Farel, who was in charge of the Protestant movement, learned by accident that Calvin was in the city, and, securing an interview with him, persuaded him, after much serious pleading, to assume charge of the situation. Such was his organizing genius that the new movement gained the ascendancy, but the stringent regulations with which he began his work of moral reformation offended the "Libertines," through whose influence he lost his hold, and was expelled. He fled to Strasburg, where, "with a sense of relief," he gave himself up more completely than ever to his favorite study of theology; but the Genevan authorities finding him indispensable induced him to return and assume control of the religious, moral, and civil administration of the city.

Educational Services.—It was in immediate connection with this mission of city reformer that Calvin felt obliged to organize educational facilities. The foundations had already been suggested by Zwingli, with whose work, as well as with that of Melanchthon and Sturm, he must have been familiar, and he planned secondary schools, or gymnasiums, which he called "colleges" (1538-1541), and persuaded his old teacher Corderius to come from Paris to help him in the work. It is from Corderius that we gather the main features of these "colleges." They were preparatory schools, in which Latin and Greek classics were taught, together with the trivium, religion, and singing, and the students were graded into seven classes. It was Calvin's hope to educate promising young men for leadership in the church and state, and therefore without the wish to injure the more practical recommendations of Zwingli, he added a university to his colleges (1559) as a completing process, and called it the "Academie" of Geneva. He served the cause himself as teacher and professor, lecturing to thousands of students.

The one fact which gave Calvin a much bigger school than Switzerland was that Geneva had through him become the "house of refuge" for Protestant exiles from everywhere, who in turn took not only his religion but also his educational ideals back with them into the Netherlands, France, Germany, England, and from these countries to America.

JOHN KNOX

John Knox (1505-1572), the great Scotch interpreter of Calvinism, an exile at home in Geneva two years, wrested educational control from its bondage to feudalism, ecclesiasticism, and royalty, and vested it in "parishes," thus founding free elementary schools in Scotland. These schools were to provide boys and girls primarily with an education in reading, writing, and religion, with the Bible as the text, but the masters were mostly university graduates, and this made it possible for boys of humble origin to reach the university and through it the highest positions in church and life.

ULTIMATE ADJUSTMENTS

The dominant motive of the Reformation, as we have seen, was to give the masses, as well as the classes, an "open Bible" for religious and moral reasons. This privilege, based as it was upon the essential rights of the individual, carried with it the promise as well as the duty of other educational opportunity, having civic relations and livelihood in view. The appeal of Luther to the mayors, and the efforts of the other reformers to organize such opportunities, is in direct line with these convictions, and thus elementary schools for both boys and girls became an early reality. This result was hastened by the fact that the Reformation, in itself an educational stimulus, became additionally stimulating, when through its great interpreters it broke its adherents up into denominations.

Elementary Schools.—The individual rights and responsibilities for which the Reformation stood, committed the movement from its very inception to the establishment of such educational facilities as served the ends in view. In other words, the new movement included recommendations and provisions for elementary schools not only in the cities and towns, but also in the country districts. The "church orders" which, through Luther's inspiration, Bugenhagen began to send out to the Protestant cities and states as early as 1520, provided not only for a Latin school, as at Hamburg, but also for a German school and a school for girls in every "parish." In 1524, through Luther's "Letter," Magdeburg united its parish schools under one management and adopted the Protestant ideals.

Through Melanchthon Luther established similar schools at Eisleben in 1525 and for the state of Saxony in 1528. Duke Christopher adopted a modification of Melanchthon's Saxony plan, and in 1559 established schools for the religious and moral training of the children of the common folk in every village of the Würtemberg duchy. Ten years later Brunswick, and soon afterward Saxony, made new rules and regulations to improve their school systems. Other German states followed suit, establishing elementary schools before the middle of the seventeenth century.

Wherever the Reformation found foothold elementary schools accompanied the movement. Denmark, for example, adopted the Hamburg plan as early as 1537. As already stated, similar results followed Calvinism into the Netherlands, Scotland, France, and elsewhere.

In England the Reformation, owing to Henry VIII, failed to produce the same results until the Puritans took up the cause of the common man. In 1536 Henry VIII, in order to destroy the last vestiges of the power that had balked him in his wickedness, began to confiscate monastic lands and property. Within a decade he suppressed over six hundred monasteries and other educational facilities. And Edward VI, as Leach shows in his "English Schools at the Reformation," was hardly a better patron of schools than his father. Nevertheless, remnants of elementary as well as secondary education, coming down from the Middle Ages, survived the devastations of Henry and his son, and rallied into new life as protégés of the Church of England and the Puritans, in the time of Elizabeth and the Stuarts.

Character of Elementary Schools.—Although, as Luther maintained, the civil authorities should share the responsibilities of establishing schools and supplying teachers, the Reformation found it difficult to supply trained teachers rapidly enough. The supervision of the schools was usually intrusted to the parish minister, on whose judgment the selection of teachers commonly depended. Even sextons were thus sometimes employed. And for this reason—to which we must add denominational bias—the elementary schools of the sixteenth and later centuries, especially in the villages and country districts, were anything but ideal.

While reading, writing, and arithmetic were included in the course of study, the stress was laid on religious instruction through denominational catechisms, together with denominational hymns and sacred songs. Lack of pedagogical training compelled the teachers to rely on the memory of the learner more than upon his understanding, and this, of course, in direct violation of the rights of individual judgment which the Reformation undertook to champion in education. As is always the case where memory is required to perform tasks which only reasoning can perform, so in these elementary schools of the Reformation the discipline was frequently harsh and barbarous. "The purpose was to tame, not to educate the pupils," says Dittes in his description of these schools.

Schools for Girls .- Through its numerous "church orders" the German Reformation early made special provisions for the education of girls. Separate schools, over which qualified women should preside, were to be established and maintained at public cost. The range of subjects, as the "school order" of Brunswick (1548) shows, was narrow enough, but better things would come in course of time. The curriculum for town and village schools was to include reading and writing, together with the catechism and the singing of hymns. Bible stories were to be read at home and told from memory at school. The school-day was to consist of two hours in the forenoon and two in the afternoon, and regular attendance was encouraged. The worthy matron who presided over a town school was to be paid the enormous sum of thirty florins a year, and, if the town could afford it, she was to have an assistant at twenty florins.* This "school order" of Brunswick gives us some idea of what was to be undertaken in schools for girls, not only throughout Germany, but in the other countries of the Reformation.

Secondary Schools.—The Reformation found it difficult to supply the church and the world with leaders. This difficulty gave rise to denominational secondary schools and universities.

Gymnasiums.—The Latin schools founded by Melanchthon, Zwingli, and Calvin, and their followers, have already been noticed. Out of these, by enrichment of curriculum and perfection in system, grew the great "central" schools of modern Europe, the "gymnasiums," into which also the Hieronymian schools and the "princes" schools were eventually merged.

* Painter's "History of Education," p. 178.

"These schools," as Doctor Painter says, "were founded in large numbers in the sixteenth century, and some of them, especially in England, have continued to the present day. In Germany, Camerarius established a flourishing school at Nuremberg (1526), Trotzendorf at Goldberg (1531), Sturm at Strasburg (1538), and Neander at Ilfeld (1543). These distinguished school directors were all more or less influenced by Melanchthon, with whom they had maintained cordial relations as pupils or friends. Academic gymnasia, which occupied a middle ground between the Latin schools and universities, and were provided especially for such students as were too young to enter upon the freedom and dangers of university life, were founded at Danzig, Hamburg, Bremen, Zurich, and elsewhere. In England the great 'public' schools of Shrewsbury (1551), Westminster (1560), Merchant Taylors' (1561), Rugby (1567), and Harrow (1571) were established." Inasmuch as Sturm at Strasburg and Loyola in the Jesuit schools represent these movements most typically, they deserve special treatment.

Princes' Schools.—Protestant rulers either suppressed the monastic or secondary church schools, as Henry VIII of England began to do in 1536, or secularized them, as in Germany and elsewhere. In 1543 Duke Mauritz of Saxony, in order to fit the more brilliant sons of native citizens at public expense for the university, and thus for ecclesiastical and civil leadership, opened such a school in each of two cities, and later on in other cities. Although these schools never became very numerous, other rulers of German states followed the lead of Saxony. These "princes' schools"—Fürstenschulen, or Klosterschulen, as they

were called in Germany—were boarding-schools, under court control, and resembled the "court schools" of Italy in general aim and course of study.

The education of princes and princesses, as in the case of Prince Edward of England and his sister Elizabeth, was of course conducted by special instruc-Inasmuch as the prince might some day be tors. king, and thus attain to great power in matters of religion, he was thoroughly drilled in the distinctive doctrines of that denomination to which he belonged, whether it happened to be Catholic, Lutheran, or Calvinistic. Nor did this denominational bias disappear rapidly. Doctor Painter's description of the daily routine of George III of Saxony, who was born in 1647, may be taken as a type of princely education. "At seven o'clock in the morning he arose with a brief prayer. While he was being dressed the attendants sang a hymn; then with the court he went to morning prayers; afterward he retired to his apartment for private worship, or on days of preaching to the church. Then followed two hours of study, which began with a brief prayer for divine assistance and concluded with a psalm of thanksgiving. The hour from ten to eleven was devoted to recreation. After dinner several hours were devoted again to study, including instruction in dancing. From five to six recreation and supper; at eight prayer with the whole court, after which the prince withdrew to his apartment, and after private worship, retired promptly at nine o'clock."

STURM

Though not himself a reformer, John Sturm was a contemporary of the great reformers of the sixteenth century, and eminently the product of the age.

In the Making.-Johann Sturm (1507-1589) was born at Schleiden, in the Eifel district of western Germany. As a boy he went to school with the children of a count, and was afterward sent to Liége to the school of the Brethren of the Common Life. What he carried away from Liége prepared him more than anything else for the task to which Strasburg presently invited him. In the meantime, not even dreaming of the great opportunity which was awaiting him, he studied and lectured both at Louvain and Paris. In 1536 the city of Strasburg, having in mind the establishment of a gymnasium, invited Sturm as rector. After a thorough study of the situation, during which time he adopted the principles of the Reformation through Bucer, with whom he became acquainted here, he recommended (1538) the Liége idea on a larger scale, as a city proposition, and the scheme was adopted. The institution which was thus established, and of which Sturm remained rector for about fortyfive years, embodied the ideals of the age more completely than all other representatives, and therefore deserves special treatment.

The Strasburg Gymnasium.—In Sturm's scheme the means to the ends in view were selected with astonishing singleness of purpose.

Ends in View.—Sturm voiced the highest sentiment of his age when, in his Strasburg scheme, in obedience to the principles of the Reformation, he proposed to produce Christian men, and when, inspired by the purest humanism, he also proposed to reproduce the best periods of Athens and Rome. To know what the ancients knew, to speak Ciceronian Latin as eloquently as Cicero spoke it, and Greek as Demosthenes spoke it, and to be pious as required by the Reformation catechisms—these were the high aims of Sturm. He gathered up these aims in a nutshell when he said: "A wise and persuasive piety should be the aim of our studies."

Curriculum.-As means to these ends Sturm worked out in great detail a classical course of study, ennobled by religious instruction, covering about ten years, the pupils to enter upon this course at the age of six or seven. The classical course-for "wisdom" and "eloquence"-began with Latin grammar. During the four years of drill in grammar, the pupil was required to memorize the vocabulary of every-day life, and to read dialogues which embodied this vocabulary, thus preparing him gradually for the translation of Cicero and the easier Latin poets. In the fourth year exercises in sentence construction were begun, and to this work was added a grammatical and literary study of Cicero, Vergil, Terence, Plautus, Sallust, Horace, and other authors, with a great deal of practice in letter-writing, declamation, disputation, and the acting of suitable plays. Greek was introduced in the fifth year. Three years of hard training in grammar paved the way for the dramatists, together with Homer, Demosthenes, and Thucydides. Rhetoric and logic were added to grammar the last three years. The course in religion-for "piety"-began with the study of the Reformation catechism in German for three years, and in Latin for three years longer. In the fourth year the Sunday Sermons were read, and in the fifth the Letters of Jerome were added to these, while the Epistles of Paul were carefully studied from the sixth year to the end of the course. Latin as the language of the classroom superseded the mother tongue almost from the beginning: apart from a little geometry no attention was paid to mathematics; apart from a little astronomy no attention was paid to natural science; and such branches as geography and history were not even mentioned.

Methods.—According to Karl Schmidt, Sturm introduced two methods of studying an author: "reading a small quantity accurately," and "getting over the ground." From his "Classic Letters" of instruction written to the teachers of the various classes in the Strasburg gymnasium we learn that Sturm valued "thoroughness" rather than "ground covered," and that, as an incentive to study, he advocated corporal punishment. He took frequent counsel with his teachers, and insisted upon enthusiastic fidelity.

Success.—The Strasburg gymnasium was a wonderful success. "In 1578," to quote Raumer, "the school numbered several thousand pupils, among them about two hundred of noble birth, twenty-four counts and barons, and three princes. Not simply from Germany, but from the most different countries, from Portugal and Poland, Denmark, France, and England, youths were sent to Sturm." Through his pupils, and also through his numerous books and voluminous correspondence, Sturm's school became the popular model for the classical schools, not only of his own time, but of several centuries. The later introduction of mathematics, modern languages, and natural sciences has modified the curriculum and qualitative character of secondary education, not only in Europe, but elsewhere. Nevertheless, Sturm may certainly be considered a second "Præceptor Germaniæ."

Estimate.—With Paroz, who refers to the matter at length, and with others, we must lament this influence of Sturm on secondary education. His treatment of the German language at a time when, through Luther's translation of the Bible, it had rapidly become a vigorous and powerful vehicle of thought and culture, was anything but wise in pedagogy. This blunder, and the exclusion from the course of such useful studies as geography, history, and the sciences, removed his school too far from daily life, and the violent divorce of reason from memory to which the slavish "drill" of such a course reduces study is simply unpardonable.

LOYOLA

The Reformation became a powerful stimulus to education in the "mother church." Able men like Erasmus, as we have seen, had spoken in no uncertain tones, urging moral reforms through education. And now that, through the remissness of those who had become the sole guardians of faith and morals, the church had lost her absolute authority over the individual, every effort must be made to restore this authority and to save the church from similar catastrophes. Strange to say, this "new movement" within the mother church did not begin in the highest counsel of the church, but in the mind and heart of devoted individuals. Pre-eminent among these self-appointed champions of "mother church" was Loyola.

In the Making.-Ignatius Loyola (1491-1556) was a knight of the little Spanish kingdom of Navarre, and a contemporary of Luther. He had been trained for the profession of arms. In 1521 Francis I invaded Navarre, and besieged Pampeluna. Here Loyola was severely injured, and after most heroic conduct, he was made a prisoner. Released, he was taken to his father's castle, where, after great suffering, he slowly recovered. This was the crisis in his life. The only books which he found to relieve the tedium of his confinement were books of devotion and the "Lives of the Saints." This course of reading inspired in him the desire to do some service for God and the church. Presently, through bitter disappointments, he realized that little could be accomplished without an education, and therefore, although he was now thirty-three years old, he entered the Barcelona grammar-school, and later took courses in the universities of Alcala and Salamanca. In 1528 he went to Paris to continue his studies, especially in theology, and remained there seven years. In 1534 he and six fellowstudents, among them the celebrated Francis Xavier, took the vows of chastity, poverty, and obedience, and solemnly devoted themselves to the care of the church and the conversion of infidels. In 1540, after much opposition, he secured the pope's partial recognition of his order, which was now named the Society of Jesus, or "Jesuits," and of which he became "general" a year later. Full recognition was granted in 1543, and all operations were henceforth directed from Rome by him and his successors.* Later popes added

* Americana, vol. IX.

all sorts of privileges regarding such matters as founding schools and serving the general public, and the organization has continued to adjust itself to the changing requirements of nearly three centuries with a degree of success that challenges admiration, whatever else we may think of the fundamental principles involved.

The Jesuits.—The military setting with which the career of Loyola began fitted him peculiarly for the task which, as a result of his conversion, he believed to be his great mission. This mission, as already intimated, was threefold, namely, to restore the supremacy of the mother church over the individual in her care, to win the world for her dominion, and to combat Protestantism because, as the champion of individuality, it threatened to defeat these ends. While other means were, of course, to be employed, education was to be the chief and final resort, and must therefore be planned in absolute harmony with these purposes.

Organization.—Loyola conceived that the only system of education which would serve these purposes especially that of obedience on the part of the individual to the church—must rest upon a military foundation. Accordingly, the "constitution" of the "order," which he drafted, but which was not published until two years after his death, and of which Part Four, relating especially to a detailed administration of schools, was not finally revised until 1599, when Aquiviva was general, provided for a most effective gradation of supervising officials and instructors. At the head of this organization was a "general," elected for life, who as the vicar of God in the "order" was to send out instructions from Rome, and whose word was to be final. "Provincials," appointed by the general for three years, were to have control of "districts," into which the world would be divided by the growing society. In each district there were to be, besides other institutions, various "colleges," and men known as "rectors," appointed by the general but responsible to the provincial, were to be the presiding officers. Under the rector were "prefects of studies," appointed by the provincial, and then "professors," or teachers, with "monitors," or assistants chosen from among the students. This original organization has never been seriously modified.

From the very beginning great care was exercised in the selection of locations, for, in order to make instruction practically free to all candidates for the "order," and almost free to other students, and thus in time to supply teachers enough for the world, wealth must be interested, bequests must be solicited, and the extensive patronage of the "better classes" must be assured. These provisions, in which they have usually succeeded, helped to make the Jesuit schools powerful competitors of Protestant schools, even in Protestant territory.

The Jesuit Colleges.—With Plato of old and their philosophical master, Thomas Aquinas, the Jesuits, as we have seen, discouraged the wholesale emancipation of individuality, and therefore never established schools for the masses, but confined themselves strictly to the training of leaders selected from the higher classes, whose superior lead the masses were to accept by faith.

Accordingly, they established secondary schools called "lower colleges," and universities called "upper

colleges." In order that they might meet the demands of the age, and that they might contend successfully with all competitors, they organized such courses as those of the Hieronymians, or that of Sturm at Strasburg, to whom perhaps they owe the suggestion. The first years were devoted almost exclusively to Latin grammar, religion, and singing, and then the Latin classics, together with religion and singing, were studied three more years. During the last two years the grammatical study of the classics was enriched by rhetoric and logic, and a little Greek. Geography, history, etc., were taught only so far as necessary to the understanding of the classics. This classical course has come down almost unchanged to the present day.

The "upper colleges" devoted three years to philosophy, with Aristotle as master, and four years to theology, with Aquinas as master. The course in philosophy, which with rare exceptions was required for all who taught in the "lower colleges," included such subjects as psychology, ethics, logic, mathematics, and the natural sciences, leading to the degree of "master of arts." The course in theology, which was required for all university teachers, and which was generally open only to those who had taught the course in the "lower colleges," included not only theology proper, but also Hebrew and other Oriental languages, church history, canon law, and electives, and led to the degree of doctor of divinity. Even law and medicine are now offered by the Jesuit universities, in courses leading to the usual degrees.

Methods.—The Jesuits as teachers, highly trained and talented, never lost sight of the fundamental purposes of the society, and, judged by the success with which they adapted means to the ends in view, they have probably never been surpassed. The fundamental purposes of the order demanded that freedom of thought, original investigation, and individuality must be outlawed. It must, therefore, become the great task of Jesuit pedagogy to confine reasoning to the beaten track, and this task was accomplished with startling success by compelling the memory to work so hard that reason had but little chance to assert her claims.

Accordingly, the learner must acquire the new lesson not through text-books and private study, but through oral instruction in the classroom. A new lesson in Cicero, for example, began with the oral presentation of the sentences to be studied. When the lines had been committed by sufficient repetition, the general meaning of the lines and the sentence structure was explained. This was the "prelection." Then followed "erudition," which consisted of reference to authorities, rhetoric, and moral interpretations.

Each day's work began with a "review" of the work of the preceding day, and closed with a review of the work just mastered. Each week ended with a review of all the work of the week, and the last month of the year was devoted to the review of all the work of the year.

In his own education Loyola had learned by overwork how serious it is to health and happiness to undertake too much. He guarded against these results in his "Ratio Studiorum," by advocating few studies, short lessons, short school hours, and physical exercise.

Perhaps the most distinctive feature of the Jesuit pedagogy was the extensive resort to "rivalry" as a stimulus to excellence in study and conduct. The pupils were arranged in pairs as "rivals," each boy watching the other to catch him tripping, and then correcting him. In addition to the pairing process between classmates, the class was divided into hostile camps, called Rome and Carthage, for frequent pitched battles of questions on picked subjects. Then, too, there were public "disputations" every week, and prizes were awarded by judges. Many ingenious devices for rewards and penalties were systematically devised. Very creditable work led to honors, while particularly bad work led to disgrace. This highly organized system of competitions made even the hardest tasks of memorizing and reviewing almost a pleasure.

The Jesuit teachers took great pains to prove themselves the real friends of boys, devoting themselves almost to the point of self-effacement to this duty. Accordingly, they considered no service too onerous, and were absolutely approachable. In order to attach their pupils to themselves permanently, the Jesuit teachers seldom resorted to corporal punishment, and when such punishment became necessary, as in case of bad conduct, it was administered by outside persons called "correctors."

Popularity.—The growth of the Jesuit schools, as we might expect, was phenomenal. When Loyola died there were a hundred "lower colleges," and representatives had penetrated India, China, Japan, and Abyssinia, as well as Europe. Under Aquaviva the number of colleges and universities increased very rapidly, and in 1710 the order had over six hundred "lower colleges," over a hundred and fifty "upper colleges" in which teachers were being trained, and about twenty-five "upper colleges" that did university work. At this time there were seldom less than three hundred students in any school, and in 1675 the college of Clermont, in France, had three thousand students. Thus it came about that the Jesuits helped to shape an immense number of men who became famous as writers, statesmen, generals, etc.

They, however, failed to adjust themselves to the course of events in the eighteenth century, lost their efficiency, and deteriorated into a political machinery. Finally, after they had been banished from nearly every country of Europe, the pope himself, in 1773, suppressed the order. The order was restored early in the nineteenth century, but, although they still have great schools, the order has never recovered its former importance.

Estimate.—That the purposes for which the "order" was organized were largely accomplished cannot be denied; but the ends which they proposed are only doubtfully justifiable, and in the additional assumption that "the end justifies the means," the Jesuits could hardly avoid the use of means that were morally doubtful. In the effort to mould the higher classes to their purpose, they ignored the rights of the masses. In their ascetic ardor they closed the door of the school to woman, and ignored her possibilities.

In their pedagogy the Jesuits discouraged individual initiative and thus arrested development. The length to which they went in the use of rivalry as a stimulus often led to bitterness, and exalted success above moral honor. In short, while the claims of God were to be honored, these claims often degenerated into the

THE REFORMATION

ambitions of the order, and the rights of the individual were sacrificed to the demands of institutional control.

THE UNIVERSITIES

The universities allied themselves with the denominations which the Reformation produced, but humanism continued to give content to the curriculum, and morals suffered.

Alliance.—Many universities, among them Paris, remained loyal to Catholicism, and the Reformation, acting as a denominational stimulus, produced a number of new adherents, among them Dillingen (1554), Gratz (1586), Paderborn (1592), Salzburg (1622), Münster (1631), and several others. All of them recognized the church as their overlord.

In the states of Germany which espoused the cause of the Reformation, the majority of the universities followed the princes from the old to the new. Wittenberg, due to the influence of Luther and Melanchthon, was the first German university to become Protestant. This, as we recall, occurred in 1536. Marburg, Königsberg, Jena (1557), and others followed rapidly. Kiel was founded 1665, and Halle in 1694. They were Lutheran. Among the universities that allied themselves with Calvinistic (Reformed) Protestantism were Geneva (1558), Herborn (1654), and others. The English universities, Cambridge and Oxford, went over to Protestantism with the nation. Protestant universities very generally became state institutions.

Courses.—Instruction continued under four faculties as before, namely, philosophy, theology, law, and medicine. No really serious attention was paid to mathematics, and such sciences as physics, astronomy, and natural history continued to acknowledge Aristotle, Ptolemy, and Pliny as masters. Hippocrates and Galen remained the authorities in medicine. History and modern tongues were almost ignored, and even Greek received only inferior recognition. "All the time and strength of youth," as Raumer tells us, "were forcibly concentrated upon the learning and exercising of Latin. Grammar was studied for years in order to learn to speak and write Latin correctly; dialectic, in order to use it logically; and rhetoric, in order to handle it oratorically. Facility was sought by means of debate, declamation, and representations of Terence. The classics were read in order to collect words and phrases from them for speaking and writing, without particular concern for the thought." Thus it is seen that reason, whose high and holy cause both humanism and the Reformation had championed, once more fell back into slavery and formalism, and this not only in the Catholic universities, where Jesuit influence would account for it, but also in Protestant universities.

Morals.—The denominations which the Reformation produced, moved not only by the sense of duty, but also by keen competition, wanted teachers and leaders enough. This demand crowded the universities with students, and thus produced a state of morals that almost staggers imagination. Hazing, which resorted to barbarities now considered criminal, and scandalous orgies that sometimes ended in nothing less than murder, were all too common. In the beginning of the seventeenth century, as Duke Albrecht of Saxony*

* Painter, p. 186.

tells us, the reputation of the universities had already suffered much, and the authorities began to look about for ways and means to end the disgrace. Germany broke up the custom about 1660, and similar action became more or less general, thus giving rise to marked improvement in the university life and work.

REFERENCES

1. Myers' "General History."

2. Monroe's "Cyclopedia of Education."

3. Graves' "History of Education," vol. III, "Modern Times."

4. Parker's "Modern Elementary Education."

5. Duggan's "History of Education."

6. Lord's "Beacon Lights of History."

7. Guizot's "History of Civilization."

8. Schwickerath's "Jesuit Education."

9. Mombert's "Great Lives."

10. Quick's "Educational Reformers."

11. Hughes' "Loyola."

QUESTIONS

I. Trace the course of the Reformation as an educational event.

2. Consider Luther in the making as fully as possible. Why did Luther insist on an "open Bible"? Compare his position with that of paganism, Romanism, and modern Prussianism as an educational ideal. How were his writings related to the ends in view? Gather up Luther's ideas on education, and compare each with present ideas on the same subjects. Estimate the greatness of Luther as a force in educational progress.

3. What was there in his training and personality that made Melanchthon such a valuable coworker of Luther? In what three ways did Melanchthon serve the cause of education? Explain these services at length.

4. Account for Zwingli as an educational reformer, and describe his services to the cause of education.

5. Account as fully as possible for Calvin's presence at Geneva, and explain his services to the cause of education.

6. Account for John Knox as an educational reformer, and describe his services to the cause.

7. Give the fundamental and secondary reasons for the stimulating effect which the Reformation had on elementary education. Trace this effect in Germany, England, and elsewhere. Account for the narrow curriculum, mechanical methods, and harsh discipline in the "country schools."

8. Describe the education which the Reformation offered to girls.

9. Why did the Reformation promote interest in secondary education? Describe the education thus planned for princes.

10. How did the Reformation help to produce the Latin schools (gymnasiums)? Trace this movement in several countries.

11. Account for Sturm's humanism. Describe his gymnasium as a system of means to ends. Estimate the influence of Sturm.

12. How did Loyola come to found the Jesuits? Describe the Jesuit gymnasiums and the Jesuit colleges as a system of means to ends. Describe their pedagogical mistakes, and account for their career.

13. How did the Reformation affect the number, course, and morals of the universities?

CHAPTER XIII

THE JANSENISTS, THE CHRISTIAN BROTHERS, AND THE PIETISTS

The time came in Europe—it was hastened by the misfortunes and the sorrows of the Thirty Years' War —when thoughtful men of every creed began to realize the insufficiency of a religion that did not satisfy the heart and provide life with powerful motives in the service of God. In France this conviction produced especially the teaching orders known as the Jansenists and the Christian Brothers, while in Protestant Germany it produced the Pietists.

Cornelius Jansen (1585–1638), a Dutch professor at the University of Louvain, and later Bishop of Ypres, had made a profound study of St. Augustine, and reached conclusions regarding the grace of God somewhat similar to those of Calvin. Although his doctrines fell under the ban of the church, his followers, like the bishop himself, remained loyal to the church. Men of prominence and ability became deeply interested, and under the leadership of his friend the Abbé de St. Cyran, a number of them established themselves at Port Royal, near Versailles, to devote themselves to various ascetic activities through which they hoped to save souls.

The Port Royalists.—The Port Royal Jansenists felt that the corruption to which flesh was heir could be eliminated, and the number of the elect saved, only by religious and moral watchfulness against the wiles

of the devil. In 1643, Abbé de St. Cyran, moved by this profound concern for souls, laid the foundation of schools in which the children should be under supervision day and night. A school was to consist of twenty-five boys or less, and no master was to have personal charge of more than five or six pupils. For this reason, and also to keep the universities from thinking that, like the Jesuits, they were going to compete with them, the Port Royalists called themselves the "little schools." Similar arrangements were made for girls, who were placed in charge of women of rare and beautiful character. Like the "Oratorians," another teaching congregation founded in 1611, the Port Royal Jansenists accepted the philosophy of Descartes, and held to the development of "reason," thus coming into early conflict with the Jesuits, who, as we have seen, made much of authority and routine. The result was that in 1660, after an existence of less than a quarter of a century, Louis XIV, instigated by the Jesuits, suppressed the "little schools," and dispersed the teachers, thus, as Paroz says, robbing France of almost two centuries of progress.

Definite Purpose. — The fundamental purpose of Jansenism, as already stated, was to fortify the baptized soul against the wiles of the devil. This purpose was to be accomplished by inculcating genuine Christian piety as the only sufficient guarantee. On this point St. Cyran himself says: "It is always necessary to be on guard as in a beleaguered city. The devil makes his circuit outside; he early attacks the baptized; he comes to reconnoitre the place; if the Holy Spirit does not fill it, he will fill it."

Closely associated with the fundamental purpose of

Jansenism was that of developing the reason—"to carry forward intelligence," as Nicole puts it; "to impart to the mind a love and discernment of truth; to render it delicate in discovering false reasoning; to let it not be put off with obscure words and principles, and not to be satisfied until the foundations are reached; to render it subtle in seizing the point in complicated questions, and to discover what is relevant; to fill it with principles of truth which will be helpful in finding it in all things."

Curriculum.—Children were taken at nine or ten years of age and kept through the difficult years of the "teens" if possible. "Up to the age of twelve," we are told, the pupils were occupied with sacred history, geography, and history, under the form of amusements, in a manner to develop their intelligence without wearying it. The regular course of study began at twelve and included the Greek and Latin classics, together with grammar, rhetoric, logic, mathematics, and the Church Fathers. Physical culture and science received scant notice. Said Nicole: "The sciences should be employed only as an instrument for perfecting the reason."

Methods.—In order to carry the intellect of the pupil to the highest point, the Jansenists avoided the deadening routine of the Jesuits, and boldly followed reason. Accordingly they addressed instruction "first to the senses" if possible, and used pictures. Pascal invented phonic spelling. The first schoolbooks were not Latin, but French texts prepared by the Port Royalists themselves, and excellent expurgated translations of the Greek and Latin classics, through which the learner was introduced to the thought before he took up the

form or language of the classics. In this way they bravely broke away from bondage to the past, and paved the way for the ultimate use of the mother tongue in secondary schools. Moreover, as disciples of Descartes in psychology, they strove to adapt instruction to the pupil's capacity, thus allying themselves with Comenius, Pestalozzi, and other great reformers of pedagogy. Much freedom was permitted in study and the conduct of recitations. To quote an old French writer: "If study sometimes intrenched upon recreation, recreation also had its turn, for circumstances were taken into account. In winter, when the weather permitted, the teacher gave his lesson while taking a walk. Sometimes they left him to climb a hill or run in the plain, but they came back to listen to him. In summer the class met under the shade of trees by the side of brooks. The teacher explained Vergil and Homer; he commented upon Cicero, Aristotle, Plato, and the fathers of the church. The example of the teachers, their conversation and familiar instruction, all that the pupil saw, all that he heard, inspired him with a love for the beautiful and the good."

In school discipline the Port Royalists, contrary to prevailing custom, but in line with their rule of reason, relied on wholesome admiration of the teacher rather than on force, and therefore resolutely rejected corporal punishment on the ground that it hinders moral growth and piety. For the same reason, and because the only true rival of the pupil is his own higher self, they condemned the emulation and prizes so sedulously cultivated by the Jesuits. St. Cyran, the founder of the little schools, keeping this great purpose of building character for time and eternity in mind, went to the greatest pain to secure teachers who had the requisite qualifications, laying special stress on self-control, patience, and piety. "Speak little," said he, "put up with much, and pray still more"—a most admirable rule for any teacher.

Estimate.—It is probably true, as has been said, that the atmosphere of excessive piety in the Port Royal school life must have chilled the natural spontaneity of childhood, but the experiment served as a protest to the noise and commotion so prevalent in the schools of the time. We are told that, owing to the exclusion of rivalry, the Port Royalists were "never able to secure the energy, earnestness, and pleasing environment of the Jesuits." On the other hand, we know that they escaped the deadening formality of routine, and thus promoted that healthy mental growth which must always be the pride of pedagogy.

While it is to be regretted that the "little schools" were closed too soon to do the good which they were meant to do, it was probably best in the long run, for the dispersed teachers turned to writing, thus spreading their views, and in the long run giving Port Royal pedagogy a decided ascendancy over that of the Jesuits in France, an ascendancy which continues. Among the writers through whose books their ideas live are Nicole, the moralist and philosopher, who wrote "The Education of a Prince"; Lancelot, the grammarian, who wrote "Methods of Language Study"; Arnauld, a great theologian, who wrote text-books on grammar, logic, geometry, and "The Regulation of Studies in the Humanities"; Pascal, a literary giant, who wrote the "Provincial Letters" and "Thoughts," most terrible

arraignments of the Jesuits; Fénelon, who wrote "The Education of Girls," and Rollin, who wrote "Treatise on Studies."

FÉNELON

The achievements of Fénelon and Rollin embody the spirit of Jansenism in education most completely, and thus deserve special attention.

François de Fénelon (1651-1715) was of noble lineage. In body he was not robust, but he had remarkable aptness for learning. Through the watchful care of his father, and later of the Marquis de Fénelon, his uncle, he was able to enter the college of Cahors at twelve years of age, and then the University of Paris. It was the wish of his parents that he should study for the priesthood, for which high calling he was fitted by nature. He took up theology at St. Sulpice, and was ordained at the age of twenty-four. He became a famous prelate, but in the meantime served the cause of education as teacher and writer.

Teacher of Girls.—In 1678 the church, because of his special fitness, made him the head of the Convent of New Catholics, an institution whose purpose it was to reclaim young women to Catholicism. In this position, owing largely to his charming personality and good judgment, he achieved great success, remaining there ten years. Almost at the close of this period, and at the suggestion of some friends whom he thus hoped to help, he wrote his first most important work, "The Education of Girls." Compayré calls it "the first classical work of French pedagogy."

Ideas.—In this valuable treatise Fénelon sets forth in a very systematic way the Jansenistic conception of what should constitute a woman's education. Although he assumed, as was common in his day, that nature had excluded women from the sphere of politics, the law, the ministry, and other high vocations requiring sterner qualities, Fénelon realized with keen perception the marvellous capacity of women for good or evil in the world, and therefore the great importance of an adequate education.

The infancy of girls should be piously guarded in body, mind, and character, lest their own future be compromised and the fabric of society be ruined. He held that fiction and the stage produce a wandering imagination and an emotional tension most serious to social and moral welfare.

In order to save girls and to fit them for the high estate to which God was calling them, they were to be instructed in such useful branches as reading, writing, arithmetic, and elementary civics, and after that in history, literature, music, painting, and the like, but always in such a way as to guard against moral injury. Religious instruction was to be specially emphasized, and yet not in such a way as to "frighten her from piety by a useless severity."

The psychological insight of Fénelon, like that of his fellow Jansenists, was far in advance of his time. He realized the pedagogical value of recreation and companionship, and encouraged the largest possible freedom of thought and action so long as these did not lead to evil. His words to a lady of high rank on the question of her daughter's religious education deserve to be quoted at length. "Accustom her," said he, "to enjoy herself in every way short of sin, and to find her pleasure apart from debasing amusements. Choose companions for her who will not spoil her, and recreation at such hours as will not give her a distaste for the serious occupations of the rest of the day. Try to make her delight in God; do not suffer that she think of him only as a mighty and inexorable judge, who constantly watches us in order to reprove and restrain us on every occasion; make her see how kind he is, how he suits himself to our needs, and has pity for our weaknesses; familiarize her with him as with a tender and compassionate father."*

Tutor of a Duke.-In 1689 Fénelon became tutor to the Duke of Burgundy, grandson of Louis XIV. The boy was proudly conscious of his royal lineage, and therefore hard to teach. To make matters worse, although he was by nature warm-hearted, he also had a violent temper, which made control difficult. Fortunately. Fénelon was gifted with marvellous pedagogical insight and literary skill. In order to interest the proud duke in history, he constructed "Dialogues." in which the shades of distinguished men of antiquity discussed all kinds of political, moral, and philosophical questions; "Fables," in which the duke could see himself morally as in a mirror; and the "Telemachus," a story on the order of Homer's "Odyssey," full of historical, political, and moral instruction calculated to fit the duke for his high future. This method of indirect instruction was a great success.

Fénelon was equally successful as a characterbuilder. With his psychological insight, and the tender solicitude of the Jansenists for the moral and eternal welfare of souls, Fénelon strove to win the bright and impulsive boy through self-control, patience, and piety.

* Painter, p. 248.

thus carrying out St. Cyran's injunction to "speak little, bear much, and pray still more." In other words, Fénelon had recourse to strong measures only when all other persuasions, such as praise and a charming personality, had failed, or were likely to fail. In this conflict for spiritual mastery Fénelon finally won, and the duke gradually learned to master his violent temper, becoming affable, generous, and self-poised. The effectiveness of this indirect method of discipline is startlingly illustrated by an incident in the duke's conduct. Fénelon had gently reproved the young duke for some shortcoming, when, as Fénelon's biographer tells us, he said: "I know who I am, and who you are !" Fénelon, controlling himself, made no reply; but, possessing himself in patience, and taking the matter to God in prayer, he addressed the duke the following day in a tranquil but serious tone, saying: "You recall, no doubt, the words you spoke to me yesterday. My duty obliges me to say that you know neither who you are nor who I am. If you think yourself above me, vou are mistaken; vour birth did not depend upon you and gives you no merit, and I have more prudence and knowledge than you. What you know you have learned from me, and I am above you by reason of the authority which the king and your father have given me over you. It was in obedience to them that I have undertaken the difficult and, as it seems, ungrateful task of being your teacher; but since you appear to think that I ought to feel particularly fortunate in discharging this duty, I wish to go with you at once to the king and request him to relieve me of my duties and to give you another instructor."

The duke became greatly alarmed, and bursting

into tears, he quickly replied: "I am sorry for what happened yesterday. If you speak to the king, I shall forfeit his friendship. If you leave me, what will be thought of me? Forgive me, and I promise that you will have no ground of complaint in the future."

Estimate.—That Fénelon was a past master both in the art of teaching and in the art of governing must be evident to any one who understands the force of the foregoing pages. We shall do well to catch his spirit and to practise his methods.

Like other rare spirits, Fénelon failed to receive the full measure of reward which he deserved. In 1695 he was elevated to the archbishopric of Cambrai, and devoted himself soul and body to his high calling, but theological controversies, and the loss of friends, including the king, who took offense at some remark of Fénelon in his "Telemachus," embittered his last days. He was removed from his high office, and died at Cambrai in 1715, a simple but lovable parish priest.

ROLLIN

Through Rollin, Jansenism made its way unobtrusively into higher education and its higher moral functions.

Charles Rollin was born in Paris, 1661, and died there, 1741. Had it not been for a Benedictine friar who discovered young Rollin's fine powers, he would probably have followed the simple trade of his father, that of cutler. Through this friend Rollin was able to enter the Collége du Plessis, where, due to his genius and vigorous application, he made rapid progress, early acquiring special distinction in literary studies. At the age of twenty-two Rollin became a master in his alma mater. He took a three-years' course in theology at the Sorbonne, probably the most noted Catholic seminary of France, but he did not enter the priesthood.

High Positions .- The scholarly Rollin, attaining to high positions, managed to bring into higher education in France much of what was best in the Port Royalists, . especially in the teaching of the classics and their high conception of the teacher's sacred office. When only twenty-seven years of age, "he was elevated to the chair of eloquence in the College of France, and filled the position with zeal and success. Here he encouraged the study of the French language and literature, and revived an interest in the ancient tongues, particularly in Greek. In 1694 he was appointed rector of the University of Paris, and signalized his brief tenure of two years by the introduction of some salutary reforms. In 1699 he was made principal of the College of Beauvais." Here he worked wonders, giving the school a proud place among university colleges. He introduced reforms into the curriculum, adapting it more to the age. His most conspicuous reforms were the modern ideas which he infused into the study of history and the prominence which he gave to the mother tongue over against Latin. He lost his position in 1712 through the unrelenting persecution of the Jesuits, who could not overlook his Jansenism.

Treatise on Studies.—Rollin was a prodigious writer. Although his extensive treatise on "Ancient History" (1730–1738) is best known, his "Treatise on Studies" (1726–1728) is an important contribution to the cause of education, for in this work he set forth much of what was best in the spirit and methods of the Port Royalists, but with infinite tact affects the innocent fiction of describing the ordinary practice of his colleagues. To effect his purpose most completely he quotes extensively from such ancients as Plato, Aristotle, Seneca, Quintilian, and Plutarch, and gives special credit to Fénelon and Locke. Thus Rollin's work has become a veritable treasure-house of learning and pedagogical wisdom. We are here concerned more especially with his distinctly Jansenistic views.

Ends in View .- With Rollin, as with all the Jansenists, the fundamental purpose of education was to save souls, and, as means to this end, or as reasonable correlates, to develop intellect and character. With Rollin the end in view in the study of such subjects as Latin and Greek, or history, or geometry, or logic, was not simply the mastery of those subjects, however valuable such mastery might be, but rather the power to study which the pupil should acquire as the result of study, together with the love for study which is usually the natural concomitant of right habits of study. Moreover, he looked upon acquirements in turn as simply the means to the end in the preparation of the individual for the life to which Providence should call him. And inasmuch as character is of supreme importance in any proper preparation of the individual for life, character-building must be the supreme purpose of both curriculum and methods. Right moral views, true piety, and holy living are infinitely better than great scholarship, courtly proprieties, and worldly prosperity.

Qualification of Teachers. — The same Jansenistic stress on the inestimable value of souls appears in Rol-

lin's conception of the true teacher. Scholar as he was, Rollin did not despise scholarship as a necessary qualification. Far from this, he insisted upon professional training. But—and here is the gist of it all—he believed that every teacher should go to school to Jesus Christ. It is only from the great teacher that we can hope to receive "the spirit of wisdom and knowledge, the spirit of counsel and strength, the spirit of learning and piety" which we need as saviors of children and trainers of men. What the teacher of children needs most of all is something of the tenderness and solicitude for children which the great missionary apostle Paul felt for the Galatians.

Public Schools.—The same solicitude for souls appears in Rollin's comparison of public and private schools. He quotes other authorities, and then, with the characteristic "reasonableness" of the Jansenists, he puts it up to the natural guardians of children to decide. "As the dangers are very great to youth on all sides, it is the duty of parents to examine well before God what course they ought to take, equitably to weigh the advantages and disadvantages which occur on both sides, to be determined in so important a deliberation only by the motives of religion, and above all to make such a choice of masters and schools, in case they follow that course, as may, if not entirely dissipate, at least diminish, their just apprehension."

Languages.—The Port Royal "reasonableness" is particularly conspicuous in his reference to the study of languages. Rollin contended almost vehemently that the French people should give the same attention to their mother tongue as the ancient Romans gave to Latin. And he saw that the languages should be taught by "likeness of data," or apperception, beginning of course with the mother tongue. He rests his argument upon the assumption, which is pretty well supported by philology, that all languages are largely alike in the elements, and he draws the conclusion, largely supported by modern practice, that if the learner approaches Latin and Greek through French, let us say, he will find less trouble to master the dead language because the approach is natural, and that therefore in turn he will find more pleasure in study.

Girls.—In some respects Rollin falls behind Fénelon in his views on the education of women. Granting that sex does not "in itself create a disparity," he asserts that Providence did not intend women for the great professions, but rather for the queenly reign of a household, and that therefore, with rare exceptions, the dead languages should not be included in her course of study. Great emphasis should therefore be put on domestic affairs, to which should be added a very practical course in reading, writing, arithmetic, and history. Instruction in religion and morals must, of course, as in the case of boys, be the chief concern.

Rules of Government.—St. Cyran's injunctions to teachers "to speak little (self-control), bear much (patience), and pray still more (piety)," have been expanded by Rollin into an extensive list of fine rules for school management, on which it would be difficult to improve. They may be briefly summarized as follows:

1. The teacher should study the temperament of every child, and then, with admirable self-control, he should punish only to correct. Sarcasm, exaggeration, harshness, and passion never accomplish the proper objects of school management. The rod should never be used without reason and moderation, and then only for well-defined, obstinate rebellion. Cuffs and blows and other stultifying treatment are unpardonable.

2. The teacher should watch over the conduct and character of children with infinite patience, praising honest effort when possible, but guarding against vanity. Rewards as well as praises should supplement the nobler incentives to school virtues, and no effort should be spared to encourage rather than discourage the child.

3. With Rollin, as with all the Jansenists, piety, or Christlike personality in the teacher, was the supreme element of governing power. "It is a good fortune," says he, "for young people to find masters whose life is a continual lesson; who practise what they preach, and shun what they censure; and who are admired more for their conduct than for their instruction."

Estimate.—It is true enough, as has been said, that Rollin's contributions to pedagogy were rather those of great scholarship than those of great originality, but his absolute fidelity to the things of the soul will always command the respect and compel the reverence of true teachers.

THE CHRISTIAN BROTHERS

The Jansenists, like the Jesuits and other Catholic orders, were engrossed in secondary and higher education. In 1684, however, La Salle, a French priest, founded the Institute of the Christian Brothers, which, in time, was destined to accomplish for elementary education in France and other Catholic countries what the Jesuits accomplished in secondary education. Earlier attempts, like that of the "Piarists" at Rome (1617) and of Charles Démia at Lyons (1666), with local and special purposes, were either merged in this larger movement or succumbed to opposition.

LA SALLE

Jean Baptiste de la Salle (1651-1719) was born at Rheims, and, like Fénelon, of noble lineage. Even as a child he loved to commune with holy things, and religion was the passion of his whole life. In the vigorous pursuit of an education, he was often handicapped by a weak physical constitution; but, gifted with force of character, he literally fought his way through the local university. He took his master's degree in 1669, and then studied theology at St. Sulpice and the Sorbonne in Paris. He entered the priesthood in 1678.

La Salle served the cause of education more especially as the founder of the Institute of the Christian Brothers (1684) and as author of the "Conduct of Schools" (1695).

The Institute.—When La Salle, as successor to his beloved spiritual adviser, Nicolas Roland, first took upon himself the general supervision of sisters who conducted a free school for girls, he was not seriously interested, as he himself tells us, in education. Presently, however, a relative of Rouen requested him to assist in the opening of a free school in Rheims, of which Adrian Nyel was the master. The success of this school led to the foundation of others, until there were five masters in the town. La Salle soon discovered that in spite of himself he must take an interest in these men, and, acting first as their adviser, he decided before long to resign his canonry and his worldly possessions and live with them. In 1681 a house was purchased, and the foundation for the "Institute of the Christian Brothers" was laid. A rule was drawn up, which was the basis of the later rule; new teachers joined the community, and the demand for the Brothers of the Christian Schools rapidly increased. Unable to satisfy any requests except those from towns, he undertook to train boys who were sent to him by the country clergy, and who were to return to their homes after their period of training. In 1685, about "fifty years before Hecker founded the first Prussian normal school at Stettin, and twelve years before Francke organized his teachers' class at Halle, La Salle founded a 'Seminary for Schoolmasters,' a real normal school, in which teachers were to be trained for rural districts. Only Démia had preceded him in this work. Later he founded an establishment of the same kind in Paris, and-a thing worthy of note-he annexed to this normal school a primary school, in which the teaching was done by the students in training under the direction of an experienced teacher." The extension of his work in Paris brought him much care and persecution, and yet he found time to organize not only primary schools, in charge of trained teachers, but also facilities for special education of various sorts.

Conduct of Schools.—La Salle drew up (1695) a code of instruction, somewhat like Loyola's *Ratio Studiorum*, which he called the "Conduct of Schools," and in which he explains the purposes of education, the daily routine of the "Christian Schools," together with rules and regulations. This code, first published

at Avignon, in 1720, the year after his death, has been several times revised and brought up to date, especially in 1811 and 1870.

Purposes.—Moved by a deep and abiding piety, and a genuine sense of Christian responsibility, "La Salle thought only of the children of artisans and of the poor, who, he said, being occupied during the whole day in earning their own livelihood and that of their families, could not give the children the instruction they need, and a respectable and Christian education," and he hoped not only to provide such education gratuitously, but also to make it compulsory.

Curriculum.—The modest course of study to which the code commits the Christian Schools consists almost wholly of religion and good behavior, together with reading, writing, and arithmetic. In the higher grades a little Latin was to be taught through the mother tongue, as in the Port Royal schools.

Methods.—The course of instruction was to begin with reading in the mother tongue. Writing was not to be learned until the pupil could read perfectly. Calligraphy became a specialty, but the practical side was not to be forgotten. To this end great stress was laid on writing notes, receipts, bills, etc. In arithmetic very little else besides the four rules of operation were to be taught, but these were to be learned by reason rather than by routine. A half hour each day was to be devoted to the catechism, and the religious exercises were to be conducted with great reverence.

The schools were graded into three classes, and the "simultaneous method of instruction" was used from the beginning. In other words, classes of pupils, instead of one or two pupils at a time, came up to the teacher to recite. This method, now so common, was a new thing in La Salle's time.

One unique feature of the Christian Schools is the silence to which La Salle committed not only the pupils but also the teacher in much of the communication between them. This was accomplished by means of a system of signs.

The discipline of the Christian Schools, as well as the routine, was reduced to a system of mechanical rules and regulations, and, until quite recently, included methods of corporal punishment that were humiliating, to say the least.

Estimate.—La Salle's work should be judged in the light of the times to which he belonged. While much of his pedagogy, especially the mechanical silence and asceticism upon which he insisted, cannot be defended, his devotion to the cause of the children for which he lived and worked deserves perpetual admiration. He certainly deserves credit also for the originality with which he organized his normal school and the simultaneous method of instruction.

PIETISM

Pietism in Lutheran Germany, like Jansenism in Catholic France, and Puritanism in Episcopalian England, was not a revolt from orthodoxy, but a protest against the dead formalism and intolerance to which denominationalism had reduced orthodoxy. The "Thirty Years' War" (1618–1648), itself a denominational conflict, intensified the situation and made it intolerable to thoughtful minds. Pietism.—Thus arose the desire to subordinate orthodoxy to a religion of life and love—a religion which should really recognize the freedom of faith and conscience for which the reformers of the sixteenth century contended, and which should prove itself by love to God and deep concern for souls. Godly men like Johann Arndt and especially Philip Jacob Spener (1635-1705) fathered German Pietism, and August Hermann Francke (1663-1727) brought Pietism into relation with education.

SPENER

Spener was the most notable of a group of Lutheran theologians to protest against the dead orthodoxy of the times. He began to study theology at Strasburg when only sixteen years of age. Three years later, in 1654, he began to lecture on philosophy and history. In 1664 he was made doctor of philosophy at Strasburg, and two years afterward he became pastor at Frankfort. He was a man of fine natural abilities, large attainments, and deep spirituality. In 1670 he began a series of meetings (collegia pietatis) at his house, to which young men were invited for intimate study of the Bible and for the promotion of genuine personal piety. The movement spread rapidly and made a deep impression throughout Germany. From 1686 to 1691 he was the court preacher at Dresden. In 1691 he went to Berlin, where he became intimately associated with the founding of the University of Halle, and where, notwithstanding an invitation to return to Dresden in 1698, he remained to the end of his life.

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FRANCKE

In Francke, Pietism became a most fruitful educational philanthropy.

Francke was born at Lübeck, on the Baltic. In 1676, only thirteen years of age, the precocious and deeply religious boy entered the highest class of the gymnasium at Gotha. Here, through the influence of Andreas Reyher, he became interested in the educational reforms of Ratich and Comenius. In 1679 he entered the University of Erfurt, but, receiving a valuable scholarship from the University of Kiel, he went there the same year, and remained three years, devoting himself especially to theology, but also attending lectures on philosophy, philology, and history. He took a special course in Hebrew under the distinguished Orientalist Edzardi, and in 1685, receiving the master's degree from the University of Leipsic, he began to lecture there on the Bible. The following year he started a society for "the careful discussion and pious application of the Scriptures." This movement attracted much attention and brought him into intimate relation with Spener, who was then the court preacher at Dresden. The experiment, however, cost him his position at the university.

At Hamburg.—In 1687 he went to Hamburg, and established a primary school. This experience, as he himself says, determined the direction of his life. "I learned how destructive the usual school management is, and how exceedingly difficult the discipline of children; and this reflection made me desire that God would make me worthy to do something for the improvement of schools and instruction."

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Great Work at Halle .- Presently he returned to Leipsic, where his lectures on Bible exegesis, "differing widely from the cold, logical process of the universities," attracted much attention, but through which he again lost his position. In 1690 he was called to a pastorate in Erfurt, from which the enmity of the conservative clergy drove him in a short time. In 1691, through the influence of Spener, he was called to the newly founded University of Halle as professor of Oriental languages. Here he also became the pastor of a poor suburban parish, and thus found the great opportunity for which he had prayed—the opportunity for educational philanthropy. It is doubtful whether the work which Francke accomplished in this suburb of Halle has ever been paralleled. Francke began his work in a very modest way. The poor used to come to his parsonage on Thursday to receive alms. He made up his mind very promptly to add religious instruction to almsgiving. In this way he soon discovered that poverty and ignorance often went hand in hand. The discovery touched his great heart, and he often deprived himself of comforts in order that he might go to the rescue of needy souls. Presently he turned to his friends for help, and put up a poor-box for contributions. One day a good-hearted woman placed seven florins in the box. When Francke found the money he was very happy. He began to see that he could start a school for the poor. He soon began to purchase necessary books, and employed a needy student of the university to teach the poor in the parsonage several hours every day. The undertaking was so successful that the parsonage could not accommodate the many pupils, and more commodious quarters had to be found.

Money and friends came to him in answer to prayer, and his work grew to such extensive proportions that at the time of his death in 1727 it comprised institutions as follows:

1. The school for the poor, with which his work had begun in 1695, and which continued to prosper wonderfully.

2. A primary school to which the citizens of Halle sent their children, paying a small fee. Here several thousand boys and girls went to school to be trained as teachers in 1727.

3. The Orphan House where ten overseers had charge of a hundred boys and thirty-four girls. Modern orphan homes have sprung in great numbers from this pattern.

4. The Latin School, where the more talented boys of the Orphan House together with the sons of citizens were given a fine training. In 1727 this school had thirty-two teachers under three inspectors, and the pupils numbered four hundred.

5. The Pedagogium, which was a well-organized boarding-school for boys who could afford to attend. Here the languages, mathematics, sciences, arts, etc., were taught in connection with religion. This institution was equipped with a museum of natural history, a physical laboratory, a chemical laboratory, and a botanical garden. In 1727 there were eighty-two students in attendance.

6. As early as 1696 a training-school for teachers was established, and called the *Seminarium Praceptorum*. We are told that only La Salle's Institute preceded this attempt to found normal schools. This school attempted to supply teachers for Francke's institutions and other European schools. 7. In time a "free table" was established to accommodate the needy university students who taught in Francke's schools.

8. Francke was a very practical man. This appears from the fact that he established a bookstore, a papermill, a printing-press, a drugstore, and other facilities. These means added to his income, and served as a convenience.

At the time of his death Francke had under his supervision in the several schools and institutions four thousand two hundred and seventy-three people.

A large plot of land was acquired and suitable buildings erected for the housing of these institutions. The necessary means for the maintenance of so large a plant were obtained partly through the commercial and industrial enterprises to which attention has already been called, and partly through gifts which came from all parts of Germany. In 1708 Frederick I, King of Prussia, paid a visit to the institution, and being highly pleased, added valuable privileges.

Francke's Pedagogy.—The two conspicuous features of the pedagogy of Francke were a deep and abiding piety, and, as in the case of Comenius, a keen modern insight into the problems of mind and life.

Ends in View.—Francke's first purpose, like that of St. Cyran and La Salle, was to save souls, and thus to serve God, and, in the founding of his institutions, he depended upon prayer to bring him the necessary help. "A grain of living faith," said he, "is worth more than a pound of historic knowledge; and a drop of love, than an ocean of science." But, having emphasized the "better part," this truly Christian lover of souls gave all his educational institutions a vocational trend most definitely modern. "In all instruction," said he, "we must keep the pupils' station and future calling in mind." We must teach them to "act wisely in life, wherever God may place them."

Courses of Study.—Accordingly, "In the instruction of those who are destined to unprofessional employments and trades, the most important thing after religion is an acquaintance with the indispensable arts of reading, writing, and reckoning; but the elements of other branches of knowledge should not be neglected, especially the elements of natural science, geography, history, and government, which, however, are to be brought forward incidentally and later." Francke saw the importance of pleasure and recreation in schoollife, and pointed out as means to ends, physical exercise, mechanical employments, gardening, and the examination of new and interesting objects of nature and art.

Methods.—In his treatise on the education of children, Francke directed teachers to study the individuality of pupils. Like the Jansenists and the Christian Brothers, he insisted on the mother tongue and direct observation as the correct approach to curriculum. Probably Ratich and Comenius had paved the way for Francke in this realism. Much as he expected the memory to accomplish, he was utterly opposed to any divorce of memory from reason and understanding.

Discipline.—In the rules of discipline which Francke urged upon his teachers, he reminds us strongly of Rollin's Jansenism.

We may sum them up under piety, patience, and self-control.

1. The teacher's personality counts for more than all else, and should therefore be profoundly Christian.

2. The teacher should cultivate cordiality and forbearance, correcting the faults of children by instruction rather than by punishment. Punishment may, however, become necessary.

3. The teacher should control himself, never punishing children in anger, nor abusing them with harsh epithets, nor scolding them for stupidity.

Estimate.-Francke's energy was marvellous. The amount of work which he could perform would overwhelm an ordinary man. His connection with the institutions which he founded, and which he developed into such extensive correlation, did not keep him from the faithful performance of his duties to his congregation. As a professor he was a great power in the University of Halle, causing useful changes in the curriculum, and elevating the moral tone of the students as a body. The printing establishment which he founded made it possible to send forth a million and a half of Bibles and a million copies of the New Testament before the close of the eighteenth century. Under the patronage of the King of Denmark, Frederick IV, he founded a mission in India that continued over a century. The teachers and ministers who went forth from his institutions reached all parts of Europe. Count Zinzendorf, the founder of the Moravian Church, was one of his pupils.

The institutions which he founded have come down to the twentieth century, full of vitality and promise. Through Hecker, his pupil, the practical studies which Francke encouraged in secondary education, became the foundation of the modern *Real Schulen* of Germany. Through Spener and Francke the University of Halle became the parent of modern universities, both in curriculum and method.

It is true that in time Pietism, like Jansenism in France, and Puritanism in England, ran into fanatic extremes which offended true conservatism both in religion and in education, but it is equally true that the spirit of Spener and Francke still hovers over us, and rests upon education as a blessed benediction.

REFERENCES

I. Compayre's "History of Education."

- 2. Graves' "History of Education," vol. III, "Modern Times."
- 3. Painter's "History of Education."
- 4. Monroe's "Cyclopedia of Education."

QUESTIONS

r. Account for the beliefs of Bishop Jansenius as fully as possible, and explain the presence of his ideas at Port Royal.

2. On what fundamental points did the Port Royalists differ from the Jesuits? Point out in great detail the reasonable adaptation of means to ends, and account for the fate of the "little schools."

3. Account as fully as possible for Fénelon's "Education of Girls." Explain his indirect method of instructing a duke, and point out the Janseni m in his management of the duke.

4. Account as fully as possible for Rollin's presence in higher institutions of learning. Point out the Jansenism of his views on four or five big educational questions.

5. Put your best estimate on the worth of Jansenism as a contribution to the cause of education.

6. Compare the influence of Fénelon and Rollin on education with that of Sturm and Loyola.

7. What were the "Christian Brothers"? Compare their purposes with that of other teaching congregations.

8. Account fully for La Salle's Institute, and explain the views which he sets forth in his "Conduct of Schools."

9. Should you consider the Jansenists and Jesuits competitors or supplements as contributors to the cause of education?

-... ro. What was Pietism? Account for its origin, and give Spener due credit.

11. Account fully for Francke's Pietism. Explain his Hamburg experiment and his great work at Halle.

12. What were the remarkable features of Francke's *Pedagogium?* Compare the radius of Francke's influence with that of Loyola and La Salle.

13. To what extent did Jansenism and Pietism escape the formalism into which the humanism of Sturm and the Jesuits degenerated? Would the faithful exaltation of individuality really save educational systems from formalism? Adduce proofs.

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PART IV

REALISM

CHAPTER XIV

REALISM

Reaction against the extreme positions of humanism was inevitable.

Retrospect.-The literary beauty which had taken the world of the fifteenth century captive was largely a beauty of structure and style, but the men who were moved by these charms "opened the Bible," and thus helped to produce the sixteenth-century Reformation. in which freedom of conscience and reason were the watchwords of individuality. The new ideals, as we have seen, came into collision with tradition and prescription, and thus produced not only religious wars like those of Philip II of Spain and Ferdinand of Bohemia (the Thirty Years' War) but also educational wars like that of the secondary schools and universities in the training of denominational leaders and teachers. In these rivalries the very watchwords of the Reformation lost their power, and Protestantism, like Catholicism, organized its ideals into rigid formalism. Prescription and repression once more gained the upper hand almost everywhere. Reaction was inevitable.

Realism .- The very wars which produced these new prescriptive and repressive denominational "fortresses" also produced new champions of human freedom, and this time, in realism, as the third phase of the Renaissance, truth rather than beauty, and religion in the prescriptive sense became the watchword, so much so that to some extent at least both beauty and religion suffered. Fortunately for the human spirit, this tension, because it is not inherent, did not persist very long, and although it has not disappeared completely from the twentieth century, promises to do so. This third phase of the Renaissance is called "realism," and may be defined as a demand for education that deals with the realities of the present life and prepares for its tasks. There were three stages of realism, namely, humanistic realism, "social realism," as Doctor Monroe calls it, and sense-realism.

Humanistic Realism.-Even when humanism began to lose its power over those who dared to think for themselves, they could not at once emancipate themselves from that worship of the past to which the world had become accustomed. When, accordingly, the social fabric of the age, together with ever-present "nature" and its forces, began to attract the attention of these thinkers, they sought mental refuge in compromise. They began to see that current humanism had failed because it had emphasized form, or language, above content, or ideas, but stoutly insisted that if the content rather than the form of the classics were emphasized, they were still the best sources of information in the study of man and nature, and in the adjustment of the one to the other-which adjustment was now assumed to be the great end in view in education. This view, of which Rabelais and Milton were probably the best exponents, is known as "humanistic realism," from the fact that it undertook to understand the present through the past.

Social Realism.-The social realists were men of affairs, interested in the public life of the age to which they belonged, and therefore in favor of an education that would answer practical purposes. Accordingly, they deplored the pedantry of humanism, and its divorce from real life, and turned impatiently from the life of the far past to that of the living present. An aristocratic individualism, looking to personal success in public life, dominated all their views. They believed that what the young aristocrat needed was an education in practical wisdom, secured not in the schools but through a tutor who should choose both subject-matter and method, with an eye single to success in life. They emphasized the living languages and travel for contact with living men, and valued history and politics above grammar and rhetoric. A good physique and fine manners, with a little military dash thrown in, was encouraged, and, although religion was not neglected, it was not allowed to handicap worldly wisdom. This class of thinkers was probably best represented by Montaigne and Locke.

Sense-Realism.—The sense-realists also turned away from the past to the present, and from ideas handed down in books to ideas ascertained first hand through a study of things, which term included both nature and human nature. This movement was therefore really a later development of that earliest interest in nature which characterized the Italian Renaissance in its first appearance. Men dared to study nature for themselves, caring little for authority, even that of Aristotle. Nature itself was consulted and investigated by experiment, and truth wrested from mystery. Through this courageous interest in nature Copernicus (1473-1543), as a sort of forerunner, discovered that the sun was the centre of the planetary system.

Up to the time of the Reformation, however, the church was very unfriendly to such researches, and when the Reformation emancipated reason, it was rather in the service of religious disputes than for the clearing up of mysteries in nature. But the seventeenth century emancipated itself amazingly from this handicap, and bold investigators, in their first overconfidence, sometimes reached conclusions in open conflict with fundamental doctrines of religion, and in flat contradiction to the Greek authorities, venerated many centuries. Galileo invented the telescope (1609), Kepler explained the motions of the planets (1609), and Newton the law of gravitation (1685). Napier invented logarithms (1614), Descartes founded analytical geometry (1637), Leibnitz followed with integral calculus. Harvey discovered the circulation of the blood (1628), Guericke invented the air-pump (1650), about the same time Pascal ascertained that the air has weight, Boyle propounded the theory of the vacuum and of gases (1665), and Malpighi invented the compound microscope in the service of anatomy soon afterward.

Literary activity rivalled this scientific activity. The result was a golden age of letters in England and France. England produced Bacon, Shakespeare, and Milton. France produced great dramatists like Molière and Racine; letter-writers like Pascal and Madame de Sévigné; orators like Massillon; and educa-

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tional writers like Fénelon and Rollin. The greatest sense-realists of the seventeenth century were Mulcaster, Bacon, and Comenius.

RABELAIS

Among the interesting representatives of early realism was François Rabelais (1483-1553).

He was the son of a French innkeeper, and a con-temporary of Luther. In the Franciscan monastery to which his people had sent him to school, he acquired a knowledge of Greek, Hebrew, and Arabic, and undertook a wide course in general reading. When his superiors forbade him to continue his self-selected curriculum, he fled in disgust, nor did he stay long in the Benedictine monastery to which he next obtained admission, but became a sort of itinerant priest, and undertook to study the sciences of his day, giving special attention to medicine. He became a member of the faculty of medicine at Montpelier, in 1530, but remained only two years, when he was made physician to the Lyons Hospital. Nor was his roving at an end even then, but, ever devoted to his studies, he eventually became famous as the writer of "Gargantua" (1535) and "Pantagruel" (1552), two of the most sarcastic satires on education ever written, and far in advance of his age.

Ideas.—The great theme which Rabelais had in mind was an education that should benefit the whole man. Mind and body were to be nurtured together. In the training of the intellect books and things were to confirm each other. Religion was to make for character, and the pupil taught to fit himself for his place in the world of men, and to perform the tasks of manhood with grace and dignity. These ideals Rabelais ingeniously embodied in Gargantua's "school-day," in which reading and things, ideas and experiences, were to be so harnessed together that reason and memory were never divorced from each other, and "school was life." The realistic correlation of handwork, head-work, and health-culture which he proposed were anticipations of most modern propositions.

School-Day .- This school-day was to begin at 4 A. M., with reading of "some chapter of the Holy Scripture," and sometimes he was to give "himself to revere, adore, pray, and send up his supplications to that good God, whose word did show his majesty and marvellous judgments." Gargantua's programme included arithmetic, geometry, astronomy, and music, but the "trivium" so revered by the humanists was ignored. Gargantua was expected to master the substance of the books used so thoroughly that he knew them almost by heart, but what he learned was to be at once "applied to practical cases." At dinner, "if they thought good they continued reading or began to discourse merrily together" about the food they were eating and the "nature" of each article of food. "While they talked of these things, they caused the very books" which they had read on the subjects discussed "to be brought to the table" in order to assure themselves. Out-of-doors, Gargantua was to observe trees and plants, and "compare them with what is written of them in the books of the ancients, such as Theophrastus, Dioscorides, etc." Gargantua was encouraged to study the face of the heavens at night, and thus observe the changes from morning to

morning. To this head-work hand-work was to be added, for Gargantua and his fellows were to "recreate themselves in bottling hay, in cleaving and sawing wood, and in threshing sheaves of corn in the barn. They also studied the art of painting or carving." The whole course of instruction was "further connected with life by visits to various handicrafts, in whose workshops they did learn and consider the industry and invention of the trader." Even holidays, for which the finest day of each month was selected, "though spent without book or lecture," were spent in a profitable way; "for in the meadows they repeated certain pleasant verses of Vergil's 'Agriculture,' of Hesiod, of Politian's 'Husbandry.'" Special exercises for health of body were prescribed for Gargantua, and all in all his work "became so sweet, so easy and delightful, that it seemed rather the recreation of a king than the study of a scholar," and corporal punishment was never necessary.* Rabelais's efforts to win attention in this novel educational treatise were richly rewarded by the avidity with which his writings were read.

MONTAIGNE

The reaction against humanism in France is brilliantly voiced by Michel Montaigne (1533-1592).

The early education of Montaigne was meant to be an experiment, as it appears. His father put the little boy in charge of a German tutor who could not speak French, and who was to carry on all conversation in Latin. The child also learned Latin from houseservants, who never spoke French to him. The result

* Quick's "Educational Reformers," chap. V.

was that at the age of six he could speak Latin. He was then sent to the famous College of Guienne, near Bordeaux, where he was graduated at the age of thirteen, and later he studied law. The city of Bordeaux honored him signally, electing him a member of parliament when he was only twenty, and twice as mayor in middle life. In the meantime his services as counsellor had brought him much into French court life, and he appears to have served both Francis II and Henry III, the unfortunate sons of Catharine de Medici, in some capacity or other, and was probably attached to their cause. Nevertheless, having ample means, and not caring seriously for politics, he spent much of his life in philosophic retirement at the paternal chateau of "Montaigne," writing brilliant essays on all sorts of subjects, but more particularly on French "society" and on education in general. His essays on "Pedantry" and "The Education of Children" furnish us with his educational views.

Ideas.—When Montaigne discussed education, he had in mind a life of opportunity and individual fitness for the living present. His own contact with public men had taught him the utter futility of the formal humanism to which he had been subjected in his own education, and which was still very prevalent in his own country.

Ends in View.—For such a life as he had in mind, "wisdom" and "character" were the great ends in view, and these ends rather than prescription by the ancients should determine the content and method of education.

Course.—The course of study might include some of the traditional studies, such as logic, rhetoric, geometry,

and physics, and even Latin and Greek; but the emphasis should be placed on the living languages, physical culture, and extensive travel under a tutor of good judgment, "whose head is well tempered rather than well filled."

Methods.—In teaching the boy, "Let the master examine him not only about the words of the lesson," says Montaigne, "but also as to the sense and meaning of them, and let him judge of the profit he has made, not by the testimony of his memory, but that of his understanding." He recommends that Latin and Greek should be learned by speaking them, and thus compliments the method employed in his own early education. He believed that sensible methods of instruction in the schools would make the usual discipline of "rods and ferules" unnecessary, and that schools would then no longer be "merely prisons."*

Estimate.—In purpose and content, the education which Montaigne recommends is clearly "social realism" of a strongly individualistic type, while in method it is just as clearly "sense-realism." His influence on current practice, though we cannot trace it, owing to the difficult age in which he lived, must have been considerable, for he was widely read. Locke and Rousseau, as we shall see, followed his lead in their social realism, and Bacon and Comenius found his practical programme a direct road to sense-realism.

MULCASTER

To Richard Mulcaster (1530–1611), rather than to Francis Bacon, belongs the credit of paving the way for

* Graves, vol. II, pp. 248-249.

sense-realism in England and the English-speaking world.

The basis of Mulcaster's own education was laid at Eton under Nicholas Udall, a famous master. In 1548 he was at Cambridge as a king's scholar. He was graduated from Christ's College, Oxford, in 1556. Five years later he was appointed head master of Merchant Taylors' School, and taught there successfully for twenty-five years. His specialties were Latin, Greek, and Hebrew, but he devoted much time to music and the drama. He presented plays to Queen Elizabeth for several years, and she appointed him rector of a church in Essex. In 1596 he became head master of St. Paul's, and remained there until 1608. The Elizabethan Age, whose spirit he must have caught, transformed him in theory at least from the humanism to which he was subjected in his own education, and to which he was committed as head master of popular humanistic secondary schools, into a realist with ideals that would have made him feel perfectly at home in the twentieth century. The two works upon which his reputation as an educational prophet rests are his "Positions" (1581) and his "Elementarie" (1582), both in his favorite, though now almost unreadable, English.

Ideas.—In his search after truth, Mulcaster, like other realists, turned his attention to the living present rather than the dead past, and to nature rather than tradition.

Aims.—As we should expect from the period in which he lived, Mulcaster emphasized religion, but kept the practical needs of the individual well to the front, and ranged himself rather on the side of democracy than that of aristocracy. *Course.*—It was Mulcaster's idea that, "for religion's sake and their necessary affairs," an elementary course consisting of reading and writing English, together with music and drawing, should be offered to all children, boys and girls alike, whether they belonged to the masses or the higher classes. And to this course for the mind, physical culture was to be added on the ground that "the soul and the body are copartners in good and ill."

Mulcaster deplored the fact of his age that so many young people coveted a higher education simply as the road to "personal preferment," and he believed that this ambition was an injury not only to the individual but also to the social whole. Accordingly, although he admitted the educational value of foreign travel, he did not deem it essential, and thus differed from the social realists, Montaigne and Locke, and even from Milton. Nevertheless, he advocated that after a grammar-school course of four years, promising boys should be sent to universities, including "colleges for tongues, for mathematics, for philosophy, for teachers, for physicians, for lawyers, for divines." In this matter Mulcaster, with the sense-realists of all centuries, bases professional training on individual fitness, and calls attention to the folly of educating a boy for the ministry when ploughing was his special talent.

Methods.—Mulcaster strongly preferred public to private tutorial education, and emphasized the importance of healthful schoolhouses and proper playgrounds. His faith in the importance of education for the sake of religion and life led him to advocate compulsory attendance not only for boys but for girls. He respected the natural ability of the pupil, and advocated professionally trained teachers. He believed that elementary work was most difficult, and that therefore the teachers of elementary schools should have the smallest number of pupils and be paid best.

Estimate.—The aristocracy of his age and English conservatism helped to defeat the early realization of Mulcaster's advanced realism. The humanistic secondary schools, of which he was himself so large a part, were still too well intrenched in the English mind to permit much revolt, but his advanced views on primary education—especially his emphasis on the use of the mother tongue and expert pedagogy—entitle him to a place side by side with his more famous contemporary, Bacon, the father of English realism in higher education.

BACON

Francis Bacon (1561-1626) first formulated the principles of modern sense-realism. When he was hardly twelve years old his father, an officer of the crown, sent him and his brother Anthony to Trinity College, Cambridge. Here, where he remained three years, he began to distrust the scholastic philosophy of Aristotle. He now spent some time in France as an attaché of the English embassy, thus gaining valuable experience. After his return he studied law, finishing the course in 1582. Two years later he was sent to Parliament, and from that time forward he was closely identified with the fortunes of Queen Elizabeth, who called him her "Lord Keeper," and with King James, whom he served with a zeal that cost him dearly in the end. Busy as Bacon was with his public offices, he found time to contribute extensively to literature. In these contributions he belongs primarily to the history of philosophy and science, but deserves a unique place in the history of education by reason of several works which, through the interpretation of educational reformers, powerfully promoted sense-realism. These works were "The Advancement of Learning" (1605), submitted in English, and the "Novum Organum" (1620), which, probably because he failed to foresee the future of the English language, he published in Latin. These works were the first and second parts of a greater work which he had planned, and which he called the "Instauratio Magna." To the former two must be added "The New Atlantis," an ideal social fable, in which his "Solomon's House" was the prophecy of our modern research university.

"Advancement of Learning."—Young Bacon had become as dissatisfied with the humanism of the higher education of his day as with its scholastic search after truth. The large opportunities which came to him for direct contact with the life and needs of his age confirmed his early conclusion that the universities were wofully behind time.

Purposes of Higher Education.—He held that higher education should have for its purpose, not merely pleasure or preferment, nor wealth of knowledge for display, but rather the advancement of the human race through religion and science. He would, as he puts it, have the universities work "for the glory of the Creator and the relief of man's estate."

Curriculum.—Bacon did not dispute that as a handmaid to religion and culture the study of the ancients and their tongues was important, but he was opposed to the frenzied worship of style so common in his day, and compared this excessive humanism to Pygmalion's folly. This Greek artist hated women, but fell in love with an ivory statue which he had made. The sciences were Bacon's favorite studies, for through them the forces of nature could be harnessed into useful inventions, thus promoting human progress, and, when pursued to "depth of knowledge," they would "bring men's mind about to religion."

"Novum Organum."-Bacon therefore undertook to formulate what he conceived to be the proper method of science, namely, induction, and, because he believed that this method was the opposite of Aristotle's deductive "Organon," and unknown to Aristotle, he gave his new book on methods the title "Novum Organum" (New Instrument, or Method). In this book he condemned the "anticipations of nature" (scientific imagination) to which the "scientists mentioned on a previous page resorted. He urged that the student of nature should first of all rid himself of "idols," or prejudices, and that, not depending at all upon imagination, the investigator should assemble and examine specimens of the phenomena under consideration, thus arriving at the facts, or particular truths; and that afterward he should compare cases where a certain effect was present with similar cases where the same effect was absent, thus, by successive eliminations, arriving at the class-truth, or law. Moreover, he was confident that any careful investigator could arrive at the same results, and that thus great progress could be made with ease, and without loss of time. "I have held up a light," said he, when he had finished this book, "and the knowledge of nature which the world will thus acquire will be power."

Although, as we see, Bacon had missed the very essence of induction, namely, scientific imagination, or hypothesis, and its confirmation by subsequent trials, his brilliant treatment of the subject and his commanding position in the world had a very wonderful effect on thinkers, and helped to usher in science in the modern sense. This effect was probably heightened by his prophetic "New Atlantis."

"The New Atlantis."-Bacon felt sure that in giving the world his "Novum Organum" he had put an ideal state within the reach of the human race. He portrayed these expectations in his "New Atlantis," a mythical island whose inhabitants had in the course of ages attained to "ideal conditions of life and society." The pride of the island was "Solomon's House," an institution devoted to scientific research and invention. The members of this scientific organization were busy with all sorts of experiments in physics, chemistry, astronomy, medicine, engineering, etc. In these experiments Bacon prophesied "the artificial production of metals, the forcing of plants, the grafting and variation of species, the infusion of serums, vivisection, telescopes, microphones, telephones, flying-machines, submarine boats, steamengines, and perpetual-motion machines."*

It was out of these Baconian dreams that Ratich and Comenius developed their schemes of "pansophia" (all may know all), and tried to grade "circular" instruction for schools.

* Graves, vol. II, p. 265.

MILTON

The marvellous hold which the ancients continued to have on the mind of men long after the advent of realism is to be seen conspicuously in the great English poet John Milton (1608–1674).

His early education was carefully supervised by tutors. He was an apt student, and when in 1624 he entered Christ's College, Cambridge, he was master of several languages, and had read philosophy and literature extensively. After his college course he retired to Horton, near Windsor, where he devoted himself for six more years to diligent study, and cultivated poetry, producing among other poems his "Comus" (1634). In 1638 he went to Italy, meeting Grotius in Paris and Galileo in Florence. The Scottish war of 1639 brought him home, and in 1640, the year made memorable by the acts of the Long Parliament, the stress of times forced him to open a school on Aldersgate Street, London, where he maintained himself in part by teaching "the sons of some gentlemen" for about seven years. In the meantime he became an active pamphleteer, the champion of the Protestant cause and the Commonwealth. In 1644, at the suggestion of Samuel Hartlib, a disciple of Comenius and a friend of educational reforms, he wrote the "Tractate on Education," the brief treatise on which rests his claim to a place in the history of education. It was much later in life, when blindness, domestic sorrow, and political perils had ripened his genius, that he gave the world his immortal "Paradise Lost" (1667) and his "Paradise Regained" (1671).

"Tractate on Education."-Humanism and the Reformation had conspired to produce Milton, so that, although he recognized the claims of the living present, he continued to look at life rather through the eyes of the ancients than his own, and thus failed to emancipate himself completely. This humanistic realism is the characteristic note of his "Tractate on Education."

Ends in View .--- The religious impulse, as we should expect, was uppermost in Milton, and God's claims came first. On this point he said: "The end of learning is to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love him." From what he adds, we see that he expected moral perfection to result from faith and love. His famous definition of a complete and generous education shows plainly that, although religion and morality were uppermost in Milton's mind, he had not overlooked life as he found it in his age. Said he: "I call that a complete and generous education which fits a man to perform justly, skilfully, and magnanimously all the offices, both public and private, of peace and war." He evidently used the word "justly" to call attention to social relations and moral obligation. His realism is evident in the use of the word "skilfully," for he connects it with the practical pursuits of peace and the patriotic services of war. Nor can it be doubted that in the use of the word "magnanimously" Milton had in mind the promising young men of higher station who should occupy positions of trust and honor in life, and that for such responsible leadership the highest possible preparations should be made.

Curriculum.—The ambitious course of studies which Milton outlined for the select young men whom he had in mind shows how faithfully he kept all ends in view, and at the same time how devoutly he still worshipped the ancients. The classics were to constitute the basis of the ambitious course which Milton proposed, and to the content of these that of the Hebrew, Chaldee, Syriac, and even Italian, was to be added for general culture. This classical training was to be supplemented with an extensive course in applied mathematics, and later on with an extensive training in the natural and social sciences, including history and law. Philosophy and theology were to top the structure. And all these subjects, including those of the sciences and applied mathematics, were to be studied out of books, and to make the matter worse, out of the books of the ancients. Milton did not forget music, foreign travel, and, in harmony with his own custom, as well as in obedience to the needs of the times in which he lived, he proposed strenuous physical training, in which, true to his bias for the past, he would combine what was best in Sparta and Athens.

Methods.—Milton calculated that the boys whom he had in mind could finish the course which he proposed in his "Tractate" in nine years, and maintained that an "academy," where the course could be completed without change of residence, was preferable to the conventional separation of the secondary school from the university.

As an introduction to the ambitious classical course which he proposed, Milton recommended the so-called intensive plan of studying Latin, Greek, and other languages, asserting that in this way Latin and Greek might be "learned easily and delightfully in one year."

Experience had taught him the importance of adapting the assignment of tasks to the capacity of students, and he vigorously condemned the custom of requiring immature students to work on themes and orations that taxed even mature students. He valued an atmosphere of good-will, and would have the teacher cultivate cordial relations between himself and the students, thus reducing discipline to a minimum.

Estimate.—It is true that the course which Milton proposed is impossible for boys who are not Miltons, and that as a preparation for real life it is too bookish, but his lofty conception of the possibilities and destiny of man will entitle him to the niche in fame which he will always occupy, and we understand why, inspired by his lofty conceptions, the English Puritans of his age adopted the academy ideal both at home and in America.

RATICH

Among the pioneers of sense-realism was Wolfgang Ratke (1571-1635), whose Latinized name Ratichius has come down to us shortened into Ratich.

He was born at Wilster, a small town in Holstein, Germany. After a classical course in the Hamburg Gymnasium, he studied for the ministry at the University of Rostock, but, owing to some defect in speech which would keep him from success in the pulpit, he decided to devote himself to educational reforms. In the meanwhile he had returned to his native town to perfect himself in Hebrew, Arabic, and mathematics. In 1603 he went to Amsterdam, Holland, where, as a private teacher, he tried for eight years to give shape to new methods of teaching the languages. Meanwhile, however, he had spent time in England, where, as it appears, he became acquainted with Bacon's work "The Advancement of Learning" and the underlying philosophy. Encouraged by this Baconian confirmation of his own ideas, he gave them more definite form, and looked about for patrons who should make it possible for him to realize his dreams.

Response to Appeals.—Maurice, Prince of Orange, before whom he laid his plans to reform education, was willing that Ratich should try the new method on a large scale, but only in the teaching of Latin. Unwilling to submit to limitations, Ratich carried his secret to Basel and Strassburg, as well as to several courts, in search of a patron, but his efforts were unavailing.

Frankfort.—He now returned to Germany and addressed an appeal to the German princes then assembled (1612) at Frankfort for an imperial Diet. In this memorial he insisted that the young should learn to read and write their own language before other languages, and promised by the help of God to show how both old and young might acquire Latin, Greek, and other languages in a much shorter time; how schools might be established in which the arts and sciences might be taught in High German, or any other living language; and how by reducing a whole country to the same language, uniformity in government and religion could be gradually and peaceably established.

The pretensions of this memorial attracted much attention. A commission of learned men was appointed to look into Ratich's claims, and great scholars like Helvicus became his champions. He succeeded in securing the approval of two universities, Giessen and Jena. Several professors gave up their positions and devoted themselves to writing text-books based on Ratich's ideas. These professors went with him to Augsburg when that city, in 1614, called him to assist in reforming the schools. He looked upon his methods as a discovery, and would not permit his coworkers to publish anything about these methods without his consent. The Augsburg experiment was abandoned at the close of the year.

The Köthen Experiment.—The Duchess Dorothy of Weimar finally became interested in Ratich's reforms, and took lessons in Hebrew from him just to test his methods. She was so highly pleased that she persuaded her brother, Prince Ludwig of Anhalt-Köthen, to give Ratich the opportunity to prove his methods on a large scale.

Preparations.—To begin with, a band of teachers sworn to secrecy were instructed in the new art by Ratich himself. Then a printing-house, provided with type in six different languages, was opened for the publication of books. After that schools furnished with costly appliances were added, and some five hundred boys and girls were collected, and handed over to Ratich, who would of course work wonders.

Methods.—The work was organized into six grades. In the three lowest only the mother tongue was used; Latin was taken up in the fourth and Greek in the sixth. Arithmetic, singing, and religion were added to the languages. The plan required that the teacher of the lowest grade should be an affable man who should "form the speech of these young pupils by daily prayer, short biblical proverbs, and easy conversations; and correct by constant practice the faults acquired out of school."

In teaching the mother tongue Ratich began with the alphabet, calling attention to the form and the name of the letter as he drew it slowly on the blackboard, and associated it with objects, as the o with a ring. The pupil was then required to draw the letter and name it. Any interesting book like Genesis was used to teach reading. The teacher read the book for the class, going over each chapter twice, the pupils following with eye and finger. Afterward each chapter was mastered separately, the teacher reading first and pupils next, each pupil reading four lines. When the children had learned to read, the study of grammar was begun. Here the parts of speech and all other lessons were taught by means of illustrations and skilful explanation. When Latin was taken up, grammar followed reading, as in the mother tongue, and the same methods were employed. In short, all instruction was illustrative, or inductive.

Principles.—Ratich governed himself and his assistants by maxims, or rules, which, as we must now admit, need only be brought into fuller harmony with psychology to make them safe rules for all time. Among them are the following:

I. Follow the order of "nature." There is a natural sequence along which the mind moves in acquiring knowledge. The teacher should study this sequence, and base instruction on his knowledge of this sequence.

2. In teaching any subject, keep at a thing until it sinks in and is thoroughly understood. This repetition rule, so prominent in the pedagogy of the Jesuits, ends in deadening monotony, unless, as we know, the old and the new are so woven into each other that reason is kept even more busy than memory. Perhaps this is what Ratich had in mind when he proposed that nothing should be learned by heart, and nothing by compulsion or constraint.

3. In order that the attention of the learner may not be diverted by the language, "teach everything first in the mother tongue." In this maxim Ratich, like Mulcaster, put up a noble protest against the unnatural custom of Sturm and the Jesuits, and became the prophet of the future.

4. We should proceed from one study to another by likeness of data, or as Ratich puts it himself, "uniformity in all things." This was the secret upon which he relied in the Frankfort proposition to teach the languages in a shorter time. He saw what we see to-day, that whatever we know of any subject should be used in the acquisition of related subjects.

5. We should always make sure that the thing we wish to teach is really understood before we attempt to teach its properties and accessories. We violate this very fundamental principle when we try to teach the names of the letters of the alphabet before the child knows the sounds for which they stand.

6. We should oblige the pupil to learn all facts through his own examination of individuals, or cases, and all class-truths by comparison of cases, or induction. This, as the reader will recognize, is Ratich's interpretation of Bacon's philosophy as applied to pedagogy, and is evidently an extreme position, for it would deny the educational value of all testimony and expert authority.

Failure.—Ratich failed completely at Köthen, and later at Magdeburg, not because he was really on the wrong track, but for a number of reasons over which he had no control, and for other reasons. To begin with, he was too far ahead of the times in his ideas, and promised Prince Ludwig more than he could hope to accomplish in the time agreed upon. Then, too, he was wofully deficient in that good judgment which the head of a school needs in his dealings with colleagues and subordinates.

Estimate.—Although Ratich failed in his efforts to organize schools, he paved the way for men like Comenius and Pestalozzi, who avoided his extremes, and carried out with great skill those dreams of Ratich which rested upon solid foundations. All the hopes of sense-realism in education found in him a voice that commanded attention.

COMENIUS

In John Amos Comenius (1592-1670) the pansophism of Bacon found its most ardent disciple and sense-realism in education its ablest exponent.

Comenius (Komensky) was born in Moravia, Austria. His parents, as he tells us, died when he was a child, and he was brought up by guardians in the simple faith, earnest piety, and missionary zeal of the Moravian Brethren, a branch of Protestant Christianity. He received the meagre training in reading, writing, arithmetic, and the catechism which the schools of his times offered; but, for some reason or other, it was not until he was sixteen that he began to study Latin. He was then old enough to feel that there was something seriously wrong in the method of teaching Latin.

At the college of Herborn, where he began to study

for the ministry, the cyclopædist Alsted came into his life, and Ratich, with whose works he became acquainted, inspired him with the ambition of doing something worth while on his own account. He completed his education at Heidelberg, and, being too young to preach, he taught school for four years, thus acquiring valuable preparatory experience. In 1616 he was ordained to the Moravian ministry, and entered upon his duties at Fulneck. Here, in connection with his pastoral duties, he took charge of a school that had just been established, and began to think about educational reforms. He had married, and for two years led an active and happy life, little dreaming that these years were to be his last in his native land.

Untiring Activity.—The Thirty Years' War (1618– 1648) laid its heavy hands upon his country. In 1621 the Spaniards plundered Fulneck, and Comenius lost all his property. "Instigated by the Jesuits, the Austrian Government proscribed the evangelical pastors, and forced them to flee. Comenius took refuge for a time in his native mountains, but, as persecution waxed hotter, he fled to Lissa, in Poland. On crossing the border he devoutly knelt and prayed God that the truth might not be quenched in his native land."

"Didactica Magna."—At Lissa he became identified with the Moravian Gymnasium, probably as rector. Thus favored in his ambition to do something for the cause of education, he took up the study of the best educational writers of his age. Ratich and Bacon appealed to him especially, and inspired him to attempt something, as he himself puts it, "that might rest upon an immovable foundation." The result was his first great work, the "Didactica Magna," devoted, as the

title suggests, to educational principles. Although this book was not published until long afterward, and even then attracted but little attention, it laid the foundations upon which he built his whole career, and anticipated most of the great conclusions of modern pedagogy. The book covers thirty-three chapters, in which he sets forth how schools could be founded "in all parishes, towns, and villages of every Christian kingdom, where the entire youth of both sexes, none being excepted, shall quickly, pleasantly, and thoroughly become learned in the sciences, pure in morals, trained to piety, and in this manner instructed in all things necessary for the present and for the future life." In other words, Comenius advocates (1) compulsory education (2) for both sexes, and (3) makes the government responsible for schools whose (4) purpose shall be intellectual, moral, and spiritual development of the individual (5) through courses and (6) methods (7) based upon the nature of the child and his needs both (8) in the present and the (9) future life.

"Janua."—In 1631 Comenius, to carry out his "Didactica Magna" in reforming the methods of teaching Latin, wrote a little book which made him and the little Polish town where he lived known throughout Europe and beyond. He called it "Janua Linguarum Reserata," or "Gate of Tongues Unlocked," and, in order to grade the work, thus adapting it to the capacity of the learners, he divided it into one hundred chapters. In order to carry out the sense-realism to which he was committed as unreservedly as Ratich before him and Pestalozzi after him, and the pansophism for which he contended as valiantly as Bacon, he attempted to give the learner a survey of the whole field of knowledge in this little book. To this end, he built up the content of the chapters out of those actual or possible experiences of the learner which as types represented the whole circle of knowledge, and in the same way, simply by connecting things and experiences with their proper names, he furnished the pupil with eight thousand root-words or types of the Latin language in one thousand sentences. As he puts it himself: "I have classified the whole universe of things in a manner suited to the capacity of boys, and I have given the corresponding language."

"The success of the 'Janua,'" as Painter writes, "was instantaneous and immense. It was translated into Greek, Bohemian, Polish, German, Swedish, Belgian, English, French, Spanish, Italian, Hungarian, Turkish, Arabic, and one of the languages of India."

Pansophia.—Comenius long had in mind "the publication of a work that would embrace and fully exhibit the whole circle of knowledge." This would require "the establishment of an institution in which all departments of learning should be represented by the ablest scholars, and from which this cyclopædia of knowledge was to proceed." The plan reminds us strongly of "Solomon's House," the "research university" of Bacon's dream, "The New Atlantis." In 1641 the English Parliament, probably through the influence of his friend Samuel Hartlib, invited Comenius to London to consider the scheme. England, however, was on the verge of the Civil War of 1642, and Comenius was doomed to disappointment. He now thought of returning to Lissa, but just at this point a rich Dutch merchant, Lewis de Geer, invited him to Sweden and offered him not only a home, but means to carry out

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his plans. Soon after his arrival in Sweden the great Oxenstiern summoned him to Stockholm for a conference.

"Methodus Novissima."-Oxenstiern and Chancellor Skyte of the Upsal University gave Comenius an opportunity to explain his works and his plans, but advised him to give up his pansophic scheme for the time being, in order that he might prepare a work in which his educational principles might be embodied more completely with reference to the teaching of languages. His friend De Geer made it possible for him to undertake this new task at Elbing, in Prussia, where he could reside among Moravian friends, exiles like himself. Here after many interruptions and great trials he finally completed his "Methodus Linguarum Novissima," the "Latest Method with Languages." In this work, which was really a revision of his "Janua," he took the greatest care to correlate things and words, harmonized the grading of the lessons more perfectly with the capacity of the learners, and attempted in a more thoroughgoing way to teach Latin grammar by the inductive or laboratory method. In the meantime the Thirty Years' War had closed, and a commission of learned Swedes had passed favorably on his book. The senior bishop of the Moravian Brethren died in 1648, and Comenius was chosen his successor. He now returned to Lissa, where his new book was published.

"Orbis Pictus."—The "Novissima" added greatly to his fame as an educational reformer, and, although as bishop of his people he was weighed down with cares, he found time to accept a call to reform the schools of Transylvania. There was a settlement of banished Brethren at Patak, and here Comenius worked from 1650 to 1654 in a school which was to be the model for the state. During this time he worked out a system of ingenious pictures with which to illustrate his "Janua," thus producing the "Orbis Pictus," or "World Illustrated," his most celebrated book. He sent it to Nuremberg, Germany, where it appeared in 1657.

Closing Years.—Comenius had returned to Lissa in 1654. Two years later the Poles plundered the town, and he lost his house and home and manuscripts. Escaping with his life, he was a homeless exile again until Lawrence de Geer, son of his old friend, offered him an asylum in Amsterdam, where he spent his last years, teaching for his maintenance, and publishing a complete edition of his works, of which there was a large number. He died in 1670, at the advanced age of eighty years, a venerable figure of sorrows.

Principles.—There were very few phases of education that escaped the comprehensive mind of Comenius.

Purpose.—The one all-embracing purpose of education, as Comenius saw it, was intellectual, moral, and spiritual self-development. In this self-development the individual was to attain to knowledge, virtue, and piety. It is plain to see that he reconciled the claims of the individual with all the claims of the social whole and God.

Curriculum.—The curriculum should consist of the whole circle of knowledge. In other words, the course of study should be pansophic, or cyclopædic. To reading and writing should be added the liberal arts, the sciences, the languages, morality, and piety. The child should touch all of these the first six years, and

pass from the simple to the complex in three more stages of six years each, thus producing common schools for all boys and girls alike, followed by high schools for those who had the capacity and means, and universities for the great professions. Women were to participate in these opportunities because they were human beings, endowed with gifts and possibilities of the highest order. As stated in the title of the "Didactica Magna," the government was to make itself responsible for this very democratic system of schools, and the natural guardians of the child were to be compelled to send the child to school. This is virtually our modern system of education.

Methods.—In his schoolroom pedagogy Comenius was distinctly a Baconian sense-realist, beginning with the study of things and proceeding by induction. Things and words were to be taught together, in the mother tongue. The pupil was to learn other languages by "likeness of data" or, as we should say, by apperception. All rules were to be taught by means of examples and practice was to precede theory, the one leading to the other, and the two to go together.

Estimate.—In his sense-realism Comenius went rather to extremes. After all, as Quick says, "our education must enable every child to enter in some measure upon his inheritance, and not a few of our most precious heirlooms will be found not only in scientific discoveries but also in those great works of literature which the votaries of science are apt to despise as miserable books." Professor Laurie says that Comenius "accepted only in a half-hearted way the products of the genius of past ages." He substituted his "Janua" for Cicero and Vergil. Then, again, Comenius was altogether too much inclined to judge the child's nature by that of birds and trees and seasons, thus "substituting for the nature of man nature without man."

As we might have expected, his Latin schoolbooks failed because they were only "briefs" of the world and of language. He was wrong in thinking that man should know all things, and especially in the idea that this could be accomplished through briefs or "compends."

Although in one place he says that it is certain that there can be nothing in the understanding that was not first in the senses, he saves himself from the perils of this extreme realism by assuming elsewhere that reason and revelation are also sources of knowledge.

The one thing which he saw most clearly, and for which alone he deserves a high place in the history of education, is that "every human creature should be trained up to become a reasonable being, and that the training should be such as to draw out God-given faculties."

LOCKE

John Locke (1632–1704), the English philosopher, was a utilitarian sense-realist.

In the Making.—He was born in a humble Wrington cottage of Somersetshire. While not wealthy, the Lockes were well descended. His father was a lawyer and served as captain in the Parliamentary army. The boy's education was carefully supervised. At the age of fourteen he was sent to Westminster School, a Puritan institution, for his preparatory course, and remained six years. Then he entered Christ Church College, Oxford. The intellectual and moral commotion through which Cromwellian England was passing must have stirred the soul of Locke, and he soon found himself at war with the antiquated humanism of Oxford, but finished his course regularly in 1656. He continued to reside at Oxford, and for brief periods was lecturer on Greek, rhetoric, and philosophy.

Later, about 1658, perhaps because he was never very strong, he took up the study of medicine. In 1667 he became an attaché of Lord Shaftesbury's family, first as physician and later also as tutor of that nobleman's son and grandson. After the fall of Shaftesbury Locke fled to Holland, where he remained for six years, returning to England in 1689. In 1691 he was welcomed into the home of Sir Francis Masham, where he lived the rest of his days.

During his connection with Lord Shaftesbury Locke found himself much in company with the brightest men of his time. In easy circumstances, and relieved from the professional work which had hindered him in his pursuit of philosophy, he was now free to devote himself almost wholly to the gratification of his highest aspirations. Accordingly, he was a student most of his life, devoting himself especially to physics, chemistry, medicine, psychology, philosophy, politics, and even theology. "Truth," as he found it first-hand—or tried to—by long and careful testing, was the passion of Locke's soul, and much of what, as tutor to "sons of gentlemen," he found worth while in education, is still worth while.

Writings.—There was a close and stimulating intellectual sympathy between Lord Shaftesbury and Locke, and it was in Shaftesbury's house that Locke first planned his "Essay on Human Understanding," in which he sought after "the primal sources and the scope of human knowledge, denying the existence of innate ideas, presenting the mind as a sheet of white paper prepared to be written upon by experience which alone supplies the knowledge there impressed, and tracing the sources of all ideas to what he calls sensation and reflection." This psychological doctrine, known as the "tabula rasa," or white paper, as the reader will recall, was also virtually the position of the sense-realist Comenius. Locke put much work on this "Essay" during his voluntary exile in Holland, and published it in complete form in 1600. The application of his sensation-psychology to the process of education is to be found in a little book on the "Conduct of the Understanding," an original companion-piece to the "Essay," which was published after his death. In "Some Thoughts on Education," published in 1693, Locke, as tutor of Lord Shaftesbury's son and grandson, applies his sense-realism as a mental process to a utilitarian curriculum specially selected for the "sons of gentlemen," thus running into a social realism that closely resembles that of Montaigne. Taking the two books together, we venture to classify Locke as a utilitarian sense-realist in his views on education.

Educational Creed. — The opening sentence of Locke's "Thoughts on Education" is his educational creed, stated in the briefest possible way, and the rest of the book is simply an elaboration. These are his words: "A sound mind in a sound body is a short but full description of a happy state in this world; he that has these two has little more to wish for, and he that wants either of them will be but little the better for anything else." Ends in View.—Locke evidently believed that the one all-comprehending purpose of education was the most perfect adjustment of body and soul, and that all else in the process and content of education was simply the means to this adjustment. This adjustment coupling physical soundness with moral soundness, as well as intellectual soundness of mind, would make all the relations of life, individual and social, both possible and highly worth while.

Physical Culture.-As a physician who had become his own patient in his early manhood, Locke had learned to emphasize hygiene, and advocated what has since become known as the "hardening process." On this point he says: "The first thing to be taken care of is that he be not too warmly clad or covered, winter or summer. . . . I should advise him to play in the wind and sun without a hat. His diet should be plain and simple. . . . Let his bed be hard, and rather quilts than feathers-hard lodging strengthens the parts." When we consider that, in the advocacy of these and other rules, Locke had not only himself but also his distinguished pupil in mind, we cannot but admire his courageous common sense, and this in spite of the fact that a too general application of some of his rules, such as exposure to wet feet, would end in mischief.

Character.—Much as Locke valued a sound body, he valued moral soundness more, placing it above all else. Speaking of the selection of the boy's tutor, he says: "Seek out somebody who may know how discreetly to frame his manners; place him in hands, where you may, as much as possible, secure his innocence, cherish and nurse up the good, and gently correct and weed out all bad inclinations, and settle in him good habits. This is the main point; and, this being provided for, learning may be had in the bargain."

But, as in his views on physical culture, so in character building, the process was to be habituation, the indefatigable submission of inclinations to the control of reason, until reason becomes master of desires. On this point he writes in his "Thoughts": "I would advise that, contrary to the ordinary way, children should be used to submit their desires, and go without their longings, even from their very cradles." "The great principle and foundation of all virtue and worth is placed in this: That a man is able to deny himself his own desires, cross his own inclinations, and purely follow what reason directs as best, though the appetite lean the other way."

Unfortunately, "to follow what reason directs as best" did not mean what we now mean by moral reason, or conscience, but rather what serves the purpose of success in life best. In a "gentleman's son" this rule would probably reduce moral motive to "sense of honor," or social advantage, or the "price" in politics. This is utilitarian realism with a vengeance.

Intellect.—Independent as his "Essay" shows Locke to be in "thinking," he is powerfully influenced by utility.

Curriculum.—In the curriculum which he recommends for the sons of gentlemen in his "Thoughts," he follows Milton and Montaigne very closely. The boy's intellectual education is to begin with such useful studies as reading, writing, and drawing in the vernacular. Arithmetic, geography, history, geometry, languages, and other studies are to be added as the boy's V

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life may require. He should also travel if possible, but under the supervision of a safe tutor.

Teaching Process.-When dealing with the mental process of the learner, and the order in which the various subjects are to be mastered, Locke, as his "Conduct" shows, and as his "Essay" would lead us to believe, was as thoroughgoing a sense-realist as Bacon, Ratich, and Comenius. When, for example, the boy is able to take up a foreign language, it was to be the language of his neighbor-in the case of the English boy, French. This, as we recall, was the idea of Comenius. Latin might be studied after the neighboring language. Like Comenius, he would correlate content studies with the study of the languages. On this point he says: "At the same time that he is learning French and Latin, he may also be entered in arithmetic, geography, history, etc. For if these be taught him in French or Latin, . . . he will get a knowledge of these sciences, and the languages to boot." Greek might be taken up at leisure in the years of manhood.

As we should expect from his "Essay," he distinctly recommends in his "Conduct" that all instruction should take the form of direct observation followed by comparison or reflection. The learning process should afford pleasure, thus serving as a stimulus; and mental growth should be secured by adding something new to the old, or, as we should say, by apperception. All these recommendations make Locke an advocate of child-study in the professional training of teachers.

Formal Discipline.—According to Locke—and this point was long overlooked—the only "royal road" to human efficiency, whether of body or mind, is vigorous training, or, as we now say, "discipline." Hence he advocates the hardening process in physical culture, the rational mastery of desires in morals, and the gymnastic study of such subjects as languages and the mathematics for intellectual excellence. On this point he says in his "Conduct": "Would you have a man reason well, you must use him to it betimes, exercise his mind in observing the connection of ideas and following them in train. Nothing does this better than mathematics, which therefore I think should be taught all those who have the time and opportunity, not so much to make them mathematicians as to make them reasonable creatures, . . . that having got the way of reasoning which that study necessarily brings the mind to, they might be able to transfer it to other parts of knowledge as they shall have occasion."

His selection of subjects is evidently based on the conviction that the efficiency which the body or mind acquires by exercise on subjects especially adapted to the purpose extends itself over a larger area than that to which the body or mind applied itself in particular. This doctrine of "formal discipline," or "educational gymnastics," became a great pet of psychology and pedagogy, but has lost much of its reputation by the contention of modern psychology that efficiency acquired in the mastery of any particular task or subject extends beyond that task or subject only to the extent that the task mastered is a type of the task in question. The doctrine of formal discipline has thus been largely displaced by that of "likeness of data," but psychologists like Angell and Judd show that the former doctrine is not wholly "a myth," and that pedagogy must continue to distinguish between content studies and disciplinary studies.

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Estimate.—Although Locke spoke only for the "sons of gentlemen," and failed utterly to provide for the masses, he called the attention of the world to the importance of the practical in education as perhaps no one else had done before him, and he contended valiantly for an efficiency that can be attained only through hardness and difficulty, thus placing himself solidly against all softness and weakness. This position was both his glory and his shame, for the "heart" —the feelings—against which he fought, are Godgiven and indispensable to human happiness and human power.

He was read more on the Continent than in England, and such men as the brilliant Rousseau extended the English philosopher's influence to educational theory in general and to child-study in particular. His doctrine of "formal discipline," greatly modified, has come down, still powerful, to the twentieth century.

INFLUENCE OF REALISM

Realism left its impress, more or less permanently, on the general practice of education.

Germany.—In . Germany, where French court life began to be the passion of the nobility, academies for the nobles, called "Ritterakademien," sprang up toward the close of the sixteenth century. Here Latin grammar, rhetoric, and religion received much less attention than in the humanistic gymnasiums, and the emphasis was put on physical culture and accomplishments, together with modern languages, military science, and mathematics, thus adapting the content of education to the régime for which social realism contended, and after the Thirty Years' War these institutions grew rapidly in number, although they were finally absorbed into the orthodox gymnasium system. Richelieu, the great prime minister of Louis XIV, established similar institutions, but they never rose to anything like importance.

England.-When the Act of Uniformity (1662) closed the secondary schools and universities to dissenters, and threw more than two thousand nonconformist clergymen out of their livings, some of these clergymen turned to teaching to support themselves, and to supply the new needs of education. Thus sprang up "academies" patterned after the ideal of Milton's "Tractate." Inasmuch as the first purpose of these academies was to train ministers, Latin and Greek became the very backbone of the curriculum, but a programme of social realism consisting of mathematics, natural and social sciences, modern languages, and especially the mother tongue, was honored side by side with the main subjects. Locke's "Thoughts" (1693) added new impulse and content to these Puritan academies, and after the Act of Toleration (1689) they were regularly incorporated.

America.—The first impulse that led to the founding of schools in the American colonies was the religious impulse, and it reproduced European humanism, but the programme of social realism and sense-realism eventually found favor and brought the Miltonian Academy. Franklin's Academy, in Philadelphia, Pa. (1751), established with the set purpose of preparing youth not merely for college, but for life in a new country, offered courses in natural science, mathematics, drawing, and English. Similar institutions were established elsewhere, especially in the New England colonies. The whole subject will come up for fuller discussion in connection with education in the United States.

REFERENCES

1. Spofford's "Library of Historical Characters."

- 2. Montagu's "Life of Bacon."
- 3. Pattison's "Milton."
- 4. Monroe's "Comenius."
- 5. Courtney's "Locke."
- 6. Quick's "Educational Reformers."
- 7. Barnard's "German Teachers."
- 8. Williams' "History of Modern Education."
- 9. Monroe's "Cyclopedia of Education."
- 10. Graves' "History of Education," vol. III.
- 11. Leitch's "Practical Educationists."

QUESTIONS

I. Why did the popularity of humanism begin to wane in the seventeenth century? What new interest now took hold of Europe? For what curriculum, method, and discipline did realism call?

2. Distinguish three kinds of educational realism from each other and account for their simultaneous presence.

3. Discuss the productive impulse which realism gave to scientific research and literary activity.

4. Account pretty fully for Rabelais's realism, and state as fully as possible the connection of ideas set forth in his books.

5. Account pretty fully for Montaigne's realism and compare his connection of ideas with those of Rabelais. Measure the influence of both critics on current practice, and trace them as far as possible.

6. Inquire as fully as possible into the reasons for the senserealism of Mulcaster, and state as fully as possible the connection of ideas which he held on the purpose and means of education.

7. Find the reason for Bacon's realism in the Elizabethan Age. What college reforms did he advocate in his books?

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8. State the connection of ideas which Bacon set forth in each of his famous books. What was Bacon's influence on his own times and future ages?

9. Gather up the personal experiences and course of English events that helped to make Milton, and account for his famous "Tractate."

10. What significant words did Milton use in defining education? Why? Compare his ideas with those of Bacon on the purpose, curriculum, and methods of colleges. Compare his influence with that of Bacon.

11. What right had Ratich to expect that Prince Maurice would respond to his appeals? What ambitious propositions did he then carry to Frankfort? Why did Prince Ludwig finally take him up? Explain his preparations for work, his inductive method, the principles upon which he founded his labors, and his failure.

12. How may we account for the pansophism and senserealism of Comenius? Account for his presence at Lissa, and explain the books which he wrote there. What defeated his pansophic scheme in London and Stockholm? What was the relation of his "Methodus Novissima" and his "Orbis Pictus" to his "Janua"? State his views pretty fully, and estimate his greatness.

13. Gather up the various educative experiences which helped to give Locke's realism such a practical turn. Account for his famous books. How far does modern psychology confirm his "tabula rasa" doctrine? State Locke's brief educational creed, and set forth as fully as possible his views on physical culture, character, course of studies, and languages. Explain his doctrine of "formal discipline," and consult present-day psychology as to the correctness of his views. Which of Locke's contentions hold, and to what extent?

14. What were the conspicuous fruits of realism in Germany, England, and America?

PART V

MODERN TIMES

CHAPTER XV

NATURALISM

The many-sided mental emancipation which the Renaissance, and the Reformation as a child of the Renaissance, had promised was doomed to temporary defeat in the seventeenth century. This result came about through the repression into which Puritanism in England and America, Jansenism in France, and Pietism in Germany, had hardened. Thus two tyrants now reigned instead of one, namely, repression and formalism. The former forbade all spontaneity, the latter forbade originality. In the meantime, even the revolutions of 1640 and 1688 could not prevent the development of the covert and open absolutism of the Georges (1714-1830), and France continued to writhe in pain under the absolutism of the Bourbons, Louis XIV (1643-1715) and Louis XV (1715-1774), while Germany was slowly but surely being reduced to the absolutism of the Hohenzollern militarism (1640-1870).

The realism of the seventeenth century, as we have seen, was an aristocratic protest of reason which succeeded in spots but failed to make any deep impression upon the general practice of education.

The great revolt against all forms of repression began to find a voice in such men as Hobbes, Locke, Des-



cartes, Voltaire, Kant, and others, but it was not until 1750 that through the brilliant but erratic Rousseau and others this revolution became a wide-spread democratic movement known as "naturalism." This eighteenth-century naturalism was, on the one hand, an aristocratic intellectualism—an appeal to pure reason instead of revelation—as in Voltaire and the French cyclopædists, and, on the other hand, a popular emotionalism, as in Rousseau. When emotionalism tried to justify itself, it appealed to reason, and thus allied itself with the intellectual revolt. In education naturalism thus became a psychological movement of vast power, into which all previous reforms gradually merged, thus producing modern pedagogy and secular schools.

ROUSSEAU

Jean Jacques Rousseau (1712–1778) was not only the eloquent exponent but also the extreme personification of eighteenth-century "naturalism."

In the Making.—Rousseau was born in Geneva, Switzerland. He inherited the romantic and mercurial temperament of his Parisian father, a watchmaker, and the morbid, sentimental disposition of his mother, a Protestant clergyman's daughter. The mother died at Jean Jacques's birth, and he was brought up by an indulgent aunt. When the boy was only six the father began to sit up with him night after night to read sentimental novels, a stock of which the mother had left, thus adding fire to the inherited emotionality and precocious imagination of the child. In little more than a year, when the novels had all been devoured, he turned to the more sensible library of his grandfather, the clergyman. Here he found biographies like Plutarch's "Parallel Lives," and the standard histories of the times, which made a profound impression upon the boy, making him still more "impatient of restraint," as he afterward said, and waking in him the strong desire to champion the cause of the poor and oppressed.

Jean Jacques was sent to school in a village just outside of Geneva, where he remained two years, and where his love of nature, already waked, became almost a passion. Returning to Geneva, he spent several years of his young boyhood in idleness and dreams, and then four years in unfortunate apprenticeships, and several more in menial service, never staying long anywhere. During these unfortunate years, often sadly marred by passion and moral weakness, he lived much with nature, and became acquainted with the sorrows of the poor, but managed to obtain a little education here and there.

At the age of nineteen, Madame de Warens took him into her home in Savoy, and he remained ten years, during which time he acquired some knowledge of Latin, music, science, and philosophy. Presently Rousseau drifted into Paris, where, as the result of a new and sorry attachment, some sense of responsibility began to develop in him in the necessary effort to earn a livelihood.

It was the age of Louis XV. Life at the court was elaborately conventional, wholly artificial, and unspeakably dissolute. As a result the upper class of society everywhere became slave to a system of conduct and etiquette that was anything but natural. The common people and peasants suffered every degradation. The air became thick with protest, and the conviction began to take shape that the only cure for the woes of the world was a "return to nature." It was in this atmosphere that Rousseau reached middle life. Everything in him—ancestry, experience, and education conspired to make him the champion and personification of this return to nature for which there was such wide-spread and passionate longing.

Writings .--- The pent-up revolution in Rousseau's breast drove him to literary production, first as a mode of livelihood, and then, in passionate earnestness, as the advocate and exponent of revolution in society and education. He first leaped into fame through a prize essay on "The Progress of the Sciences and Arts," in which he tried to prove that progress in civilization was to blame for existing oppressions and corruptions. A similar essay on "The Origin of Inequality Among Men' followed in 1753. Presently, finding conventional Paris too oppressively artificial and repressive, he withdrew to the village of Montmorency, where, after a period of unpardonable lapses, he produced by 1762 three books that startled France and Europe. The first of these was a novel, "The New Héloise," in which he pleaded for the primitive simplicity and peace of rural life; the second was his essay on political ethics, the "Social Contract," in which he pleaded for an ideal state, in which government should be vested in the general will of the people; and the third, his famous novel "Emile," in which he advocated a system of education that would restore man to his proper place in nature. In his last years, when he began to look in upon himself, Rousseau became his own bioggrapher, morbidly revealing even the inmost secrets of his checkered career, but contributing a valuable treatise on introspective psychology at the same time. It is to his "Emile" that we must turn more specially.

"Emile."—The great theme of this wonderful book is education "according to nature." Rousseau makes the announcement in the opening sentence: "Everything is good as it comes from the hands of the Author of nature; but everything degenerates in the hands of man."

Assuming the truth of this statement, Rousseau contends that the child develops by stages; that we should permit the child to be himself as much as possible in each stage of development, and that he should be brought up as far away from the contaminating influence of conventional society as possible. The Emile of Rousseau's imagination is therefore brought up in the country, under the wise but negative supervision of a tutor, and his education is completed in four periods, to each of which a part of the book is devoted. A fifth book, or part, is devoted to the education of a wife for Emile. The "Emile" is a brilliant attack on the conventional repression and empty formality of education as Rousseau found it prevalent, and a powerful, though frequently foolish, plea for an education that should be natural and spontaneous.

Infancy.—The first book of the "Emile" is devoted to the exposition of fundamentals, as just noticed, and to the education of Emile from his birth to the age of five years. In these first years nature wisely makes Emile the protégé of his parents, and they should obey nature in providing Emile with wholesome food, plenty of play, fresh air, and sleep, and clothing that will not hamper free movement or growth. For much of this advice Rousseau is evidently indebted to Locke.

Childhood .-- From the age of five to twelve Emile will want to spend much of his time in outdoor life. Let him run, jump, climb, swim, shout, etc., to his heart's content. It is "nature" at work building the boy's body. Let him follow his own inclinations as much as possible in the acquisition of knowledge. Natural curiosity will teach him to use his senses and to use them to the best advantage in the development of his intellect and the acquisition of knowledge. He will discover, almost without his tutor's instructions, how to measure, weigh, and draw things, and how to help himself even in the dark. The intellectual development for which Emile is ready at this time of life is hindered rather than helped by instruction in reading, writing, history, and literature. The only moral instruction for which he is ready is that which he gets through the discipline of natural consequence, and, if left to himself, he will not even so much as ask if there be a God.

The extremes to which Rousseau goes in these recommendations betray an astonishing ignorance of the facts in the case.

Boyhood.—From the age of twelve to fifteen Emile's rapidly ripening intellect is ready for vigorous acquisition of knowledge, but, apart from the benevolent guidance of a tutor, his progress will still be most satisfactory if he is permitted to follow the natural impulses of boyhood. The course of observations which Emile will have made by this time leads up to investigations and comparisons in the world of the senses. In other words, Emile is mentally ready for the study of nature and life as these present themselves to him through the senses or experience. Real experience will still serve Y

his purposes better than books. Rousseau, however, makes one exception to this rule in favor of "Robinson Crusoe," which is to be the first book that Emile reads, because he finds ideal self-help in this hero. This book will give him "a knowledge of the natural needs of man, and of the means of providing for them, and is a fine incentive to participation in manual work. Emile, in fact, learns during this period the trade of cabinetmaking—for its economic value in providing a livelihood, if necessary; for its social value in enhancing the dignity of labor; and for its educational value in developing skill and in keeping the body sufficiently exercised."

In these recommendations, plausible as they look, Rousseau isolates science from the valuable support of literature and history as means to ends in the development of the intellect, and betrays a lamentable ignorance of books as tools. The stupidity with which he continues to outlaw morals and religion from the boy's life is little less than abominable.

Youth.—Up to the age of fifteen Emile, according to Rousseau, has not been seriously conscious of human relationships. Now, however, he wakes up to this consciousness with something like a start, and for five years or more nature sends him to this school of human relationships, social and moral, with an imperativeness that brooks no opposition. He will still need his benevolent tutor to guard him against the perils of society, but he must continue to learn by experience rather than from others, except in extreme cases. And now, according to Rousseau, Emile also discovers the presence of God in nature, and adds Him to his necessary relationships, but his need of God is rather one of heart than head. In this psychological analysis of youth Rousseau penetrates the very mysteries of adolescence at high tide, but fails entirely to understand that religion and morals are natural co-ordinates of all stages of normal mental development.

Sophie.—The finale of Rousseau's "Emile" is the fifth book, which he devotes to the education of Sophie, Emile's "wife-to-be." According to Rousseau, Sophie exists only for Emile, and in education her individuality must be submerged into that of Emile. She is to grow up strong and robust, and must be taught singing, dancing, embroidery, and the like, in order to please Emile. Her education in religion and morals should begin early for the sake of her home.

This part of Rousseau's "Emile" hardly deserves serious attention, and is so manifestly a violation of Rousseau's own proclamation of the rights of individuality that we can hardly forgive the effrontery. Moreover, it betrays an unpardonable ignorance of woman as woman.

Estimate.—In Rousseau's "Emile" the protests of reformers like Comenius, Montaigne, and especially Locke, against the tyranny of prescription in education became uncompromising revolution. He would boldly cut loose from all positive instruction and discipline, relying on nature instead of nurture, and rather on the child's impulses than on his reason as the true interpreter of his needs and destiny.

The revolutionary courage of the book and the brilliancy of Rousseau's style, rather than the sanity and force of his contentions, compelled his readers to stop and think. And those who stopped to think saw that although Rousseau was not an expert guide himself, he was looking for such a guide. In short, Rousseau was the prophet who foresaw such reformers as Pestalozzi, Froebel, and Herbart, who gave education its new bent toward a true psychology, science, and society. From his day down to the present pedagogy has emphasized the pupil rather than the curriculum, and nature rather than tradition in the curriculum, and, by rebound from Rousseau's "Emile," the philanthropic social aspects of education, applying these conclusions to boys and girls alike.

France refused to take Rousseau's "Emile" seriously in educational practice. He had offended the state by his bold attacks on monarchy, and the church by his life and religion. It failed to make much of an impression upon the practical common sense of England. It remained for the German Basedow to found a school in which the "Emile" should be put to the actual test.

BASEDOW

Rousseau's "Emile" came into Basedow's life at the psychological moment, and thus made him its first great practical interpreter.

In the Making.—Johann Bernhard Basedow (1723– 1790) was the talented son of a Hamburg wigmaker. He refused to follow his father's vocation and ran away from home, attaching himself as servant to a gentleman in Holstein. This man soon discovered the remarkable ability of the boy, and persuaded his father to send him to school to the Hamburg Gymnasium, where he came under the moulding influence of Reimarus. Presently friends entered him at the University of Leipzig for a course in theology, but, after a rather irregular life, and a serious lapse from trinitarianism to deism in religion, he left the university.

In 1749 he became private tutor in Holstein to the children of Herr von Quaalen. It was with these aristocratic pupils that he first developed his famous methods of teaching through conversation and play, connecting instruction with surrounding objects in the house, garden, and fields. In less than four years his distinguished patron secured a professorship for him in the Ritterakademie at Soröe, Denmark, where he lectured for eight years, when the government, on account of the serious offense which he gave by his writings on religion, was obliged to transfer him to the gymnasium at Altona.

It was at this juncture that Rousseau's "Emile" came into Basedow's life as a confirmation of his methods of thinking and teaching, and as an inspiration to a fuller development of his pedagogy. The times were ripe for just such a revolution in education as Basedow, inspired by the "Emile," was about to under-take. "Youth," says Raumer, "was in those days, for most children, a sadly harassed period. Instruction was hard and heartlessly severe. Grammar was caned into the memory, so were portions of Scripture and poetry. A common school punishment was to learn by heart Psalm CXIX. Schoolrooms were dismally dark. No one conceived it possible that young children could find pleasure in any kind of work, or that they had eyes for aught besides reading and writing. The pernicious age of Louis XIV had inflicted on the poor children of the upper class hair curled by the barber, and messed with powder and pomade, braided coats, knee-breeches, silk stockings,

and a dagger by the side—for active, lively children a perfect torture." In short, children were treated as miniature adults, and education was largely a matter of instruction in deportment.

Winning Favor.-When, therefore, Basedow had explained his hopes and plans to Bernsdorf, the Danish minister of education, he was allowed to devote his whole energy to educational reforms. He began (1768) this work with an "Address to Philanthropists and Men of Property on Schools and Studies and Their Influence on the Public Weal." In this address he appealed to them for money to help him publish the books which he had submitted in outline and to organize a school in which the new ideas might be put to the test. Probably the most striking suggestions in the address were that the schools should be secularized and nationalized. At any rate, the response was prompt and gratifying. Money came to him from all classes of people and from many countries. The result was that in 1774 he was able to publish the books which he had planned. The first one, which he called "Elementary Work," was a text-book somewhat like the "Orbis Pictus" of Comenius, which he had used with his private pupils, but powerfully modified by the naturalism of Rousseau's "Emile," and the second book, called the "Book of Method," a manual for parents and teachers, in which Rousseau's natural method of learning everything by experience was advocated with great perseverance. Foreign languages, for example, were to be learned not through grammars but through conversation.

The Philanthropinum.—Through his son's tutor, Behrisch, a friend of the poet Goethe, Prince Leopold of Dessau became so greatly interested in Basedow's plans that he determined to found an institute in which they should be put to the test. Accordingly, in 1774, Basedow was called to Dessau, and under his direction was opened the famous "Philanthropinum." "Then, for the first, and probably for the last, time," as Quick puts it, "a school was started in which use and want were entirely set aside." Everything was to be done "according to nature." Love of "human nature," as the name of the school implies, was to be the dominating purpose.

Routine .-- The school at Dessau was small, never numbering more than fifty children, but representing both the well-to-do and the poorer population of the neighborhood. They were dressed and groomed for comfort and freedom of movement. Much valuable instruction was imparted in connection with outdoor games and plays, and nature was wooed in trips that added much to child happiness. The language of the children was the language of instruction, but Latin and French were also taught. The natural method was employed, in connection with acting-games, pictures, drawing, and stories. Other studies, like geography, history, and arithmetic, were not slighted, and the methods employed resembled the language method. Every boy was taught such handicrafts as turning, planing, and carpentry; but, with some deference to social demands, the rich boy spent only two hours a day on these exercises, while the boy who must earn a living by work spent six hours on them. Nothing but "natural religion" was taught, the task of teaching revealed religion being referred to the home.

Influence.—The number of pupils at Dessau was never large. Most of the visitors were pleased with

the interest and happy mood of the pupils. Even Kant, the Königsberg philosopher, declared in 1777 that the experiment was "not a slow revolution," but an organization that by its very plan must "throw off all the faults" which adhered to its beginning. In this expectation, as it proved, he was disappointed, but he still believed that the experiment was worth while because it paved the way for better things.

Basedow was in many ways quite unfit for his position, and soon lost it. Campe, who succeeded him, withdrew within a year and founded a similar school in Hamburg. Although the school at Dessau was closed in 1703, philanthropinums began to spring up all over Germany, and some of them had much influence on educational practice in general. One of these was established at Schnepfenthal by Christian Salzmann (1744-1811). This able man, whose school still lives, anticipated many of the reforms which Pestalozzi afterward introduced into primary education. These philanthropinums, together with the attractive literature which Basedow's followers produced, carried the new ideas into all parts of Germany and Switzerland, where they became the inspiration of Pestalozzi, Froebel, and Herbart. "Hence," as Doctor Graves says, "despite his visionary disposition, his intemperance, and his irregularity of living, the reformer who first attempted to embody the valuable aspects of Rousseau's naturalism in the education of Germany was Basedow, rather than Pestalozzi, who afterward transformed it so much more successfully."

One result of the naturalism introduced into education by Rousseau could hardly have been anticipated by himself in his fury nor by his biassed immediate followers. The rationalistic contemporaries of Rousseau—men like Hume and Voltaire—were intellectual anarchists. Their antisocial philosophy imperilled the whole social structure. Rousseau's naturalism, opposed to the intellectual aristocracy of rationalism, nevertheless also exalted the individual perilously above social control, and both movements tended to impoverish the conception of God's moral and eternal supremacy. Reaction was bound to follow such manifestly perilous extremes, and thus the final result of this double blow at higher claims was a new and more perfect adjustment of all claims in educational theory and practice.

REFERENCES

- I. Myers' "General History."
- 2. Lord's "Beacon Lights of History."
- 3. Guizot's "History of Civilization."
- 4. Quick's "Educational Reformers."
- 5. Compayre's "History of Education."
- 6. Graves' "History of Education," vol. III.
- 7. Morley's "Life of Rousseau."
- 8. Davidson's "Rousseau."
- 9. Lang's "Basedow."

QUESTIONS

I. Into what revolt of reason and emotion did realism grow when individuality was curbed not only by institutional repression and formalism but also by heartless absolutism?

2. Outline the personal experiences and events of the times that contributed to make Rousseau the living embodiment of "naturalism."

3. How did Rousseau come to write his most celebrated books, and for what did he contend in each?

4. What is the great theme of his "Emile," and how far is the naturalism which he advocates confirmed or condemned by modern psychology and the teaching of Christ? 5. Account for the furor which Rousseau's books produced, and the condemnation of his books on many sides.

6. Why, in spite of its very serious psychological and sociological errors, is Rousseau's "Emile" one of the most notable contributions to the cause of education?

7. At what critical moment in Basedow's life did the "Emile" fall into his hands, and what hopes did it inspire in him under the conditions of his times?

8. What patronage enabled Basedow to undertake the writing of pedagogical books, and what were his most striking suggestions?

9. How did Prince Leopold come to Basedow's assistance, and how were things done in the school at Dessau? What did Kant think of Basedow? Why did Basedow fail? Was his failure the end of such experiments as his philanthropinum?

ro. What was there in the naturalism which prompted all such experiments that imperilled the whole social structure?

CHAPTER XVI

THE PSYCHOLOGICAL MOVEMENT

The great theme of all Rousseau's contentions was the unrestricted (natural) self-development of the individual through self-activity. The new conception of education destroyed the long-lived despotism of the older conception of education as nurture (prescription and restriction). These two ideas, as we have seen, have always been contending with each other for the upper hand, and Rousseau was only another eloquent voice to whom the world was inclined to listen, first because he was so eloquent, and second because the things against which he lifted his voice had become crime against the child. His eloquence inspired a number of gifted spirits with the consuming desire to study the nature of the child, and thus to psychologize education. Pestalozzi, with whom child-study was a by-product, paved the way; Herbart, who purposely studied the mind of the child at work, developed childstudy into a science; and Froebel, as if by divine injunction, carried this science into the "holy of holies" of childhood. Thus, for the first time in the history of education "elementary education supplanted secondary education as the chief concern of those engaged in either the theory or the practice of education."

PESTALOZZI

Johann Heinrich Pestalozzi (1746–1827) was the Christian interpreter of Rousseau's naturalistic philanthropinism. In the Making.—Pestalozzi was born in the beautiful town of Zurich, Switzerland. His father, a very intelligent physician, died before the boy was six years old, leaving him to the care of his mother. He was "a mother's boy," and, under the quiet piety of his mother's house, he unfolded into a shy and dreamy boy, almost a stranger to children of his own age.

Accordingly, when he first came to school, the children dubbed the awkward and dreamy but goodnatured youngster "Harry Queer of Follyville." While trying to compete with his mates both in study and play, he was always ready to do them a good turn, and everybody loved him.

In due time his mother was able to send him to the university of his native town, where he gave a satisfactory account of himself and also became identified with a society of young Swiss patriots whose leading spirit was Lavater, and through which connections he offended the government.

Pestalozzi loved his grandfather, a minister, at whose home he was always welcome, and where he learned much about the sorrows of the poor and what a good man could do to alleviate their sufferings. As a result, he prepared himself for the ministry; but, breaking down in his first sermon, he concluded that he was not naturally fitted for this sacred office.

Afterward, in order that he might plead the cause of the poor Swiss in another capacity, he studied law; but, influenced by Rousseau's "Emile," he turned to farming, hoping to show the Swiss peasants how to improve their condition, and dreaming at the same time of improving his own fortunes. Accordingly, he studied agriculture for a year in the neighborhood of Berne, under a man who had become famous for his innovations. In the meantime, however, he had won the heart of beautiful Anna Shultess, daughter of a Zurich merchant, and they were married in 1769, from which time to the end of her life she continued to be his faithful and inspiring helpmate.

Neuhof.—He now took up a hundred acres of uncultivated land near Birr, built a house on it, and called it "Neuhof" (new farm), and moved into it with Anna. In spite of his good ideas and industry, the venture was not profitable, and the bankers who had advanced him money to promote the experiment withdrew their support.

In the meantime, before he had any doubt about his success as a farmer, Pestalozzi began to reproach himself for having been side-tracked from his great purpose to live for his beloved Swiss people. The more he thought about the matter, the more convinced he became that education must be the means to his ends. The birth of a son quickened his reflections, and, as he tells us in his "Journal of a Father," he soon realized that as an educational ideal Rousseau's naturalism must be greatly modified. He began to see what Rousseau had failed to see, namely, that home and love are nature's best safeguard and stimulus to necessary moral self-respect and self-support, and therefore indispensable to the best possibilities in the child's education.

Accordingly in 1775, by the help of his good wife's money, he undertook to convert Neuhof into an industrial school. He began by inviting twenty of the poorest boys and girls of the neighborhood, giving them a home, food, clothing, and love. The plan was to connect instruction in reading, writing, reckoning, and Bible lessons with work on the farm. In bad weather both boys and girls learned to spin and weave. He hoped that the work of the children would help him to make ends meet, and thus serve the double purpose of education and living. The children improved rapidly in body and mind, and he took in about thirty more children; but the work done by them, as was to be expected, was quite wasteful, and this, together with the suspicion of the parents that Pestalozzi was profiting at the expense of the children, defeated his noble purpose, and he was obliged to give up the experiment in 1780, heavily involved in debt.

A Soul Waiting .- The time of trial had come for Pestalozzi. The Neuhof house continued to be his home, but poverty would often stare at him through the windows, and his soul was sometimes on the verge of despair. Devoted to the great purpose of social reform through education, he took to writing books and pamphlets which embodied his principles, relying upon the meagre income of his writings as a means of livelihood. A year had not passed when his first book, "The Evening Hour of a Hermit," came from the press; but, although the work was a pretty complete statement of the great principles to which he had become wedded, it attracted little or no attention. His friends now urged him to put his thoughts into popular form. The result was his famous "Leonard and Gertrude" in 1781, which he finished in an amazingly short time, writing between the lines of an old account-book. His friend Iselin published the book, and he found himself suddenly the idol of all who could read German, for he had succeeded in depicting with sympathy and

love the sorrows of his people, and pointed out the cure. The story describes the degraded social conditions of Bonnal, an imaginary Swiss village, and the changes which one simple peasant woman brought about. The name of this wonder-worker was Gertrude. "She reforms her drunkard husband, educates her children, and causes the whole community to adopt her methods." The schoolmaster who presently arrives learns from her how to conduct the village school. Even the village pastor also catches her spirit and embodies her counsel in his. The government finally becomes interested and concludes that Bonnal should become the model for the whole country. The popularity of his "Leonard and Gertrude" prompted him to add new parts, but never with much success. In spite of the fact that he had become so famous, and knew so many famous men, among them Goethe, Herder, and Fichte, and his name had been mentioned in France with those of Wilberforce, Kosciusko, and Washington, he and his family were often without food and fire at Neuhof.

Stanz .-- In 1798 Switzerland was overrun by the French, everything was remodelled after the French pattern, and Switzerland became a "republic" with "directors." Pestalozzi set to work to serve the new government with his pen. The directors were pleased, and when they asked him what they could do for him, he told them very simply that what he wanted most was to be a schoolmaster. When some Swiss communities refused to follow the French lead, French troops were let loose, and the city of Stanz on Lake Lucerne was terribly devastated. It became the duty of the directors to come to the rescue of the unfortunates, among them one hundred and sixty-nine orphans. The directors thought of Pestalozzi and sent him to take charge of the children, giving him an unfinished convent for the "home," and here in January, 1799, he housed himself and about forty children. "The difficulties were immense. At first Pestalozzi and all the children were shut up day and night in a single room." Under these conditions he could do little else but look after immediate physical necessities, and try to comfort the children in their plight. They did not always understand him, but he gradually won them and the distrustful community by sheer love and faithfulness. As the weeks passed into months, and the number of children in his care increased to seventy or more, they learned not only to call him "father," but peace and friendship sprang up among the children themselves. Pestalozzi knew how to utilize the whole life of the school to secure these results. As at Neuhof, he tried to connect study with manual labor, the school with the workshop, and to make them one thing, but he found it difficult because staff, materials, and tools were wanting. In the absence of school apparatus and books he resorted much to direct observation, availing himself skilfully of any objects within reach, including nature as he found it out-of-doors. Thus, while he sought to teach reading, writing, numbers, drawing, and natural history, he had come to see the greater importance of a full and varied mental development through suitable sense-activity, attention, and judgment. Under his love and psychologic insight the children were becoming new creatures in body, character, and intellect.

With still greater success in sight, Pestalozzi was dis-

mayed to find in June, 1799, that the French soldiers, after a brush with the Austrians, required the use of his buildings as a hospital, and his complete abandonment of the school. Nevertheless, it was none too soon, for Pestalozzi found himself on the verge of physical collapse from the long strain, and recovered only after resting in the mountains.

Burgdorf.—Pestalozzi's sun was not to set so soon. Friends came to his rescue, and through them he was employed by the town of Burgdorf as assistant teacher in a school of which the shoemaker happened to be the head. Unfortunately, Pestalozzi's methods were too new, and he lost his position.

His friends, however, were wiser than the shoemaker, and through their influence he became the teacher of some twenty-five beginners in the burgher school. Here he was allowed to have his own way. He made all instruction start from what pupils observed for themselves, and with his wonderful insight into children and their ways, he produced such fine results in language, numbers, drawing, history, geography, and the mood of the pupils that the Burgdorf School Commission complimented him publicly. Thereupon he was promoted and put in charge of about seventy children, ranging from ten to sixteen years of age. With these older pupils and larger number he did not get along so well. Just at this juncture, when he had come to the conclusion that the art of teaching should consist of "putting the child's impressions into connection and harmony with the precise degree of development" which the child had reached, Pestalozzi's friends secured for him the use of part of the old Burgdorf castle, and its gardens. The government had also invited some thirty children from Appenzell and their young teacher, Kruesi, into the castle. Presently Pestalozzi was able to associate Kruesi and three or four other bright young teachers with himself. This was the beginning of his famous "Institute," or training-school for teachers. The school was maintained by voluntary subscriptions and some support from the government, and both day-school pupils and boarders were received. There never was room for more than about one hundred.

It was under these more favorable conditions that Pestalozzi worked out the full significance of the use of objects in the teaching of language, numbers, nature, and other school subjects, and in 1801 he embodied his conclusions in a book almost as well known as his "Leonard and Gertrude," giving it the title of "How Gertrude Teaches Her Children," and consisting of letters to a friend, describing his educational principles. The Institute attracted attention far and wide as a successful experiment in reforming elementary education. In 1805 the restoration of cantonal government and the need of the building for official purposes compelled Pestalozzi to move.

Yverdun.—He was forced to migrate to an old convent near Berne. Close by was Hofwyl, where Fellenberg had established an agricultural school on his large estate, to carry out Pestalozzi's "Neuhof" dream. Kruesi and the other teachers of Pestalozzi, recognizing that Fellenberg had as great a gift for administration as Pestalozzi had for action, thought it would be better to merge the two schools, and to submit to Fellenberg as responsible head. This arrangement, however, could not last long, for, although Pestalozzi yielded, he soon fretted under the "man of iron," and withdrew, settling himself in the castle of Yverdun, near Lake Neuchâtel. Within a year his old assistants followed him, and thus arose, in 1805, a still more famous training-school for teachers.

For some years the success of this school was prodigious. "Object teaching" became a passion, and was applied with great success to all the elementary subjects. Text-books organizing the content of the various subjects were compiled, and young men came from everywhere, either of their own accord or sent by their governments, to learn Pestalozzi's methods and to catch his inspiration. Among these promising young men were Karl Ritter, who thus became the "father of physical geography"; Herbart, who became the scien-tific exponent of child-study, and Froebel, the founder of the kindergarten. For five years or more this "community" of pupils and teachers under "Father Pestalozzi" was a veritable paradise, but in time dissensions began to creep into the school, thus diminishing the efficiency of the movement, and gradually destroying the personal ascendancy of Pestalozzi, until at last, through the evil genius of one of the teachers, the school lost its prestige and patronage to such a degree that it had to be closed, and Pestalozzi went sadly back to Neuhof, where he died two years later.

Estimate.—Inspired by Comenius and Rousseau, Pestalozzi became their eloquent interpreter through his wonderful love for children and his equally wonderful insight into their nature. That there were shortcomings even he himself recognized with chagrin and grief, but his lofty faith and his sublime courage in the face of poverty, adversity, and cruel defeat will forever command admiration.

Principles.—(1) The motive of all Pestalozzi's endeavors was to reform the social whole through universal education. The masses at the bottom of the social whole were to be educated not only because it is best for the classes higher up, but especially also because such redemption is the inherent right of every human being.

(2) In the accomplishment of this high and holy purpose the method of instruction and the means employed must be adjusted to the "natural, progressive, and harmonious development of the individual." Accordingly, all instruction must begin with direct observation, making it possible to proceed from the concrete to the abstract, from the particular to the general, and from the simple to the complex.

(3) While Pestalozzi, like Comenius, assumed that sense-perceptions are the first steps to knowledge, and therefore that observation is the basis of instruction, he was not satisfied with the knowledge gained by observation unless expression (language) kept pace with impression (ideas) in the power gained through observation. This, as we note, was going a good deal beyond Comenius, who, in the use which he made of objects in teaching, apparently thought only of the knowledge to be acquired.

(4) In the determination to grade instruction, or adapt the materials of instruction, that is, the objects selected, to the progressive development of the child, Pestalozzi undertook to find the natural "ABC of observation" for every school subject, especially for number-work, geography, language, and drawing. In other words, he tried to analyze these subjects into their elements, in order that the learning process in each study might be synthetic, which he believed to be the natural process of learning. This extreme position led him to overemphasize oral work at the expense of written number-work, and artificial synthesis of elements in reading and drawing over the more natural correlation of these steps. Nevertheless, he correctly began with "home" geography and worked outward toward "globe" geography as we do to-day.

(5) Pestalozzi's tender home-relations as a boy and as a man constrained him to believe that a similar relation should exist between teacher and pupils. And his conviction that mental development was the purpose of education confirmed his natural inclination to deal thoughtfully and kindly with his pupils, even if on occasion such kindliness had to give way to punishments for moral reasons. He certainly secured marvellous results. He literally turned the schoolroom into a place of joy instead of the place of terror which the nondescript schoolmasters of his day and other days had generally made of it under still more nondescript physical and moral conditions. Inasmuch as the feelings are the springs of action, Pestalozzi's respect for the pupil's individuality must forever be the ideal key to success in building the religious and moral character of boys and girls, and thus making this the supreme end in view in education, higher in importance beyond all measure than mere instruction or even development of intellect.

Spread of Pestalozzianism.-When Pestalozzi was placed in charge of the orphans at Stanz in 1798, he could not go back to the ideal of juvenile reform

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through industrial education to which he had devoted himself so largely at Neuhof, but he made every effort to psychologize the methods of teaching the usual school subjects, and continued to do so at Burgdorf and Yverdun.

Fellenberg.—In the meantime, however, Emmanuel von Fellenberg (1771–1844), a man of noble and wealthy parentage, had become wholly possessed with the idea that the wretched condition of the Swiss peasantry could be improved through the kind of education which Pestalozzi had tried at Neuhof. When Pestalozzi had to give up his school at Burgdorf in 1804, he and Fellenberg formed a partnership near Berne, but soon separated with mutual good-will, Pestalozzi establishing himself at Yverdun, and Fellenberg at Hofwyl, near Berne.

Fellenberg's fundamental purpose was to combine industrial education-chiefly agricultural-with the elements of intellectual education, and thus to meet the pressing needs of the masses. Presently he added a "literary institute" for the sons of wealthy land-owners, where the ordinary classical education was supplemented by physical culture and enough farm labor to produce a sympathetic understanding of the masses and their needs. Various practical accessories were added, such as a printing establishment, and even a school for girls was organized. A special effort was made to prepare teachers for the country schools. Fellenberg's idea-Pestalozzian industrialism as an integral part of education-has spread all over the world, and is pressing its claims with ever-increasing insistency not only upon Switzerland, its place of birth, but upon Germany, France, England, and America.

Psychological Pedagogy.-The psychological movement inaugurated by Pestalozzi and so powerfully pressed by his disciples, especially by Herbart and Froebel, and as fundamentally inspired by Rousseau's naturalism, is gaining an ever-increasing momentum in the training of teachers, and the sense-realism to which this movement contributed through "object-lessons," as first emphasized by such innovators as Comenius, has eventuated into the very promising nature-study of the present century. Germany, France, England, and the United States have vied with each other to be first and foremost in this psychological movement and its associated science movement. Among the foremost promoters of Pestalozzianism, as it comes to us through its Prussian garb, were Horace Mann in his (1843) seventh "Annual Report," Henry Barnard in his publications as commissioner of education, and Edward Sheldon in his "Oswego Movement" in 1860. This latter was a special "object-lesson" movement, and received the indorsement of the National Educational Association in 1865.

HERBART

Johann Friedrich Herbart (1776–1841) made a scientific study of the mind at work, and thus laid the foundation of modern scientific pedagogy.

In the Making.—Herbart was born in Oldenburg, Germany. The father was a scholarly public official, and the mother a woman of great intelligence, who watched over the education of her son with special care. Presently a tutor was employed, and the boy early showed much aptness in Greek, mathematics, and metaphysics. He completed the gymnasium course at Oldenburg in six years, and then entered the University of Jena in 1794, where he became a pupil of the inspiring Fichte, and remained three years.

Tutor.—He left before graduating in order to become the private tutor of the three sons of the governor of Interlaken, Switzerland. It was stipulated that Herbart should give the father written reports of the progress of his sons, and it was probably due to this requirement that he became a skilful observer of the mind at work.

Visits Pestalozzi.—While thus engaged for three years in Switzerland he became much interested in Pestalozzi, whose Burgdorf Institute he visited, and then wrote a sympathetic account of his observations. It is evident that his connection with Pestalozzi led to Herbart's determination to study the mental process more completely in the interests of scientific pedagogy.

At Königsberg.—In 1809, after a successful career of several years at Göttingen as private tutor and writer, he became Kant's successor at Königsberg, a place of opportunity over which his mind long lingered as "in reverential dreams," and where he remained a quarter of a century. Here in connection with his chair of philosophy he founded in 1810 a pedagogical seminary, or normal school, for advanced students in pedagogical problems, and he added a practice school which provided actual experience in teaching as well as opportunities for pedagogical experiments. He himself taught classes in the practice school, and had his students observe, until presently they could take up the work where he had begun, and give instruction under his direct observation. This was the forerunner of "model schools" and "critic teachers" in our modern normal schools.

Publications.—Herbart embodied the conclusions at which he arrived through his study of the mind in several important volumes, especially his "Science of Education" and his "Outlines of Educational Doctrine."

Herbart's Pedagogy.—The distinct features of Herbart's pedagogy may be conveniently set forth under special paragraphs.

Ends of Education.—Assuming that morality (the right and the good), mounting in its highest ascent to God, must be regarded as the highest purpose of man, the child of God, and that, as Spencer so eloquently contended just a quarter of a century later (1860), education must be defined as "preparation for complete living," Herbart held that this godlike morality, or holiness, must be regarded as the ultimate, or highest, object of education. Accordingly, the mediate objects of education must be knowledge of God, faith in God, and love to Him as final springs of action, or character, and holiness as fruit.

Curriculum.—Assuming that God reveals himself to man through "nature" and through "man" himself, Herbart held that the natural sciences perfected by mathematics, together with the social, or historical, sciences, consisting fundamentally of language, literature, and history, must constitute the essential curriculum, or trunk line, of education. In this "twofold ascent" to God and holiness, it is the special function of mathematics as the science of exactitudes to enable the sciences of nature to reveal God as infinite power, and the function of history and literature as portraits of human achievements and human aspirations to reveal man as the child of God, and thus the object of His love. This discovered love of God to man would supply the final motive of moral conduct and make for holiness (the "good" will).

In Herbart's scheme the great fact of social relation (relation between man and man) is duly emphasized, while individuality is exalted by the recognition of divine origin, and God is glorified by the most ennobling service on the part of his children.

Method.-According to Herbart this twofold ascent to God and holiness made psychological pedagogy the great necessity, and this conclusion, indeed, is his most important contribution to education. "For my part," said he, "I have devoted every energy for twenty years to metaphysics, mathematics, self-contemplation, experiments, and trials, in order to find the basis of true psychological insight. And the prime motive of these laborious investigations was, and is, above all, my conviction that a large part in the huge gaps in our pedagogical science proceeds from a lack of psychology, and that we must first have this science, yea, must beforehand get rid of the mirage called psychology, before we can determine with some degree of certainty what is right and what is wrong in a single hour of instruction."

Apperception.—Herbart agreed with Pestalozzi that instruction must begin in sense-perceptions, but realized what Pestalozzi had failed to realize, at least in a scientific way, how the mind itself combines, relates, and elaborates successive acquisitions. In other words, he saw that instruction should be the process of causing

thought which awakes right motives, and thus leads to right action as its sequence. Accordingly, in order to produce a "many-sidedness of interest," or, as we should say, that many-sidedness of "motive" which leads to the many-sidedness of "action" for which the many relations of man to man, and of man to God, constantly call, the school curriculum must be put together by "apperception," that is, the subjects and the lessons must be brought into such relation to each other as to help the mind classify, or identify, every new experience with all that is already known and that bears upon the new. This process of "mental preparedness" for each new step in the acquisition of knowledge, as Herbart believed, and as modern psychology shows, wakes up interest, and thus leads to that pleasurable mental effort which is indispensable to mental growth. Such apperceptive correlation of subjects and lessons, aiming at mental growth through the selective content of the curriculum as well as through the naturalness of the apperceptive process, has rightly been called "educative instruction" by Doctor Eckhoff, and has become one of the great watchwords of modern education.

Five Formal Steps.—Later Herbartians, assuming that the learning process consists essentially of perception and apperception, have tried to reduce all complete instruction on any subject to five formal steps, namely, preparation, presentation, association, classification, and application. If, for example, we should wish to teach case in grammar, the teacher will recall previous lessons on subjects, ownership words, and objects of a sentence (preparation), and then get the class to see that this difference of word-functions in a sentence is denoted by spelling, or form, and name this difference of form "case" (presentation). A number of examples, or illustrations, may now be compared with the first illustrations (association). This comparison is induction, and should lead to definition (classification). The use which the learner will make of his new concept is deduction (application).

It is true that this outline, or "form" of instruction, may become pedagogical idolatry, but it is difficult to avoid the conclusion that the steps in question are really the natural steps of the mind at work in any complete lesson.

Influence.—The first great advocates of Herbartianism in Germany were Professors Stoy, at Jena, and Ziller, at Leipzig.

Ziller.—In 1865 Tuiskon Ziller (1817–1883) published his conclusions in a volume entitled "The Basis of the Doctrine of Instruction as a Moral Force." He based the selection and sequence of subjects and lessons on what has become known as the "recapitulation" theory in biology, assuming that the mind, like the body, repeats the stages of evolution in the species. In this attempt he made literature and history the core of instruction through the first eight grades of school, very much in the same way that Herbart had done in secondary education. This "recapitulative" or "culture-epoch" application of apperceptive correlation is known as "concentration."

Rein.—William Rein (1847), a pupil of both Stoy and Ziller, on becoming the head of the pedagogical seminary at Jena in 1865, mapped out a curriculum for the first eight grades of school with startling success, thus making Jena the great centre of Herbartianism, from which it spread as far as the United States, where its influence has been enlarged especially through the writings of De Garmo and the McMurrys.

Herbartianism has succeeded in giving history and literature a very high place in our school curriculum, and it has stimulated the great educational bodies to pay much attention to the scientific correlation of school subjects in general. It would, indeed, be difficult to overestimate the "scientific good" which has come into pedagogy through the psychological researches of Herbart and his many able disciples.

FROEBEL

The psychological movement which began in the naturalism of Rousseau and found its intuitional interpretation in Pestalozzi and its scientific development in Herbart, reached the crest of the wave in Froebel, the spiritual successor of Pestalozzi and the founder of the kindergarten.

In the Making.—Friedrich Wilhelm August Froebel (1782-1852) was born in Oberweisbach, a village in the beautiful Thuringian Forest of Germany. His father, the pastor of six village congregations, could give very little time to the boy's education. The boy was only a year old when he lost a good mother, and the stepmother who came into his life cared little for him. As a result he spent most of his time up to the age of ten years in the woods, with birds and flowers as companions, and received very little other training. From this passage in his life Froebel later concluded that the child's first teacher should be a loving, sympathetic mother.

At the age of ten he went to live with his maternal

uncle, who sent him to school for four years. His first day in this school was a great event. The children repeated the familiar Scripture verse "Seek ye first the kingdom of God." "This verse," as Froebel tells about it himself forty years later, "made an impression on me like nothing before or since." He learned the usual elementary subjects, together with a little Latin. But the teacher could do little with the dreamy boy, and called him lazy. From this experience Froebel afterward drew the conclusion that what a boy needs most when he first comes to school is a teacher who knows boys.

At the age of fourteen he was taken home, and soon afterward apprenticed for three years to a forester. He was now in his element, and, although the forester himself could help him very little, the boy had plenty of time, which he utilized in the study of languages, mathematics, and botany, but gave himself up mostly to a deep and intimate communion with nature especially trees and plants.

"When he left the forest at the age of seventeen he seems to have been possessed with the main ideas which influenced him all his life. The conception which in him dominated all others was the *unity of nature*, and he longed to study natural sciences that he might find in them various applications of nature's universal laws. With great difficulty he got leave to join his elder brother at the University of Jena, and there for a year he went from lecture-room to lecture-room, hoping to grasp that connection of the sciences which had for him far more attraction than any particular science in itself." It was here, too, that he came under the spiritual influence of Fichte and Schelling. But the boy's allowance of money was small, and before he understood what was happening, he was put into the college prison for nine weeks for a small debt, contracted chiefly by his brother. After this sore trial he returned to his father, who now tried to interest him in farming. The failing health of his father brought the son home again, and when the father died, in 1802, the son, now twenty years old, began to shift for himself. In the effort to make ends meet he tried a number of things, but, although "he became more and more conscious that a great task lay before him for the good of humanity," he could not find himself.

At Frankfort.—In 1805 he came to Frankfort with the intention of studying architecture. Here he became acquainted with Doctor Anton Grüner, head of a Pestalozzian model school, who recognized the talent of the young man and persuaded him to become a teacher in his institution. It was thus that he finally found himself. "It seemed," says he, "as if I had found something I had never known, but always longed for, always missed; as if my life had at last discovered its native element. I felt as happy as the fish in the water, the bird in the air." He now read Pestalozzi's books and began to make experiments on motor-expression as a method of teaching, and he soon met with much success.

At Yverdun.—Having made up his mind to devote himself to teaching, but recognizing how little he knew and how poorly prepared he was, Froebel gave up his place in Doctor Grüner's school in 1808, and went to Pestalozzi's normal school at Yverdun, taking with him three pupils, who should be under his own care while he himself would study under Pestalozzi. "Thus

it happened," he says, "that I was there both as teacher and scholar, educator and pupil. In order to be fully and perfectly placed in the midst and heart of Pestalozzi's work, I wished to reside with my pupils in the building of the institution, in the castle, so called. We wished to share everything with the rest; but this wish was not granted us, for strange selfishness interfered. Yet I soon came to dwell as near the institution as possible, so that we shared dinner, afternoon lunch and supper, the instruction adapted to us, and the whole life of the pupils. I for myself had nothing more serious to do than to allow my pupils to take a full share of that life, strengthening spirit and body. With this aim we shared all instruction, and it was a special care to me to talk with Pestalozzi on every subject from its first point of connection, to learn to know it from its foundation." Froebel remained two years, acquiring much valuable training in music, naturestudy, and the use of objects in teaching, but becoming interested above everything else in the study of selfexpression in play as nature's way to self-development.

Further Preparations.—In order to discover for himself how "nature and man, inasmuch as they proceed from the same source, must be governed by the same laws," and thus help to explain each other, Froebel longed for deeper knowledge of the sciences, and accordingly spent the next two years (1810–1812) at the universities of Göttingen and Berlin.

In 1813, as the student of history will recall, Prussia in company with other countries took part in the "war of liberation" against Napoleon, and thus it came to pass that Froebel, though not a Prussian himself, became a soldier. He now learned what perhaps he might have missed in its most emphatic values, "how the individual belongs not to himself but to the whole body, and how the whole body supports the individual." This lesson saved Froebel from the extreme naturalism of Rousseau as portrayed in his "Emile," and taught him the importance of co-operation as a natural means in self-development through self-activity.

It was also during this passage in the making of Froebel that he fell in with two much younger men, Middendorf and Langenthal, whom he attached to himself in wonderful intimacy, and whom he presently called to help him in his educational experiments.

At Keilhau.-When the war was fully over-for he had kept his holy mission unfalteringly before him-Froebel looked about for an opportunity and found it. In 1816 he undertook the education of five nephews, with whom as pupils he founded a school at Griesheim, but moved it to Keilhau in 1817, and called upon his friends Middendorf and Langenthal to help him. It was to be an experiment in self-development through socialized self-activity. In the play life to which Froebel reduced much of the school process, the children built dams and mills, fortresses and castles, and hunted for insects, birds, animals, and flowers in the woods. Sometimes this free self-activity took the form of work in the garden about the schoolhouse, or useful activities in the building itself. In 1826, in order to popularize his institute, for the number of pupils was never very large, he published his famous "Education of Man," an explanatory account of his educational practice at Keilhau.

In spite of the pedagogic success of his Keilhau experiment, Froebel could not make it pay, and had to leave the school in charge of Barop and his two earlier friends, while he himself accepted a number of teaching positions in succession in Switzerland, the most important of these being at Burgdorf, where Pestalozzi had worked before him, and where in addition to his own labors as a teacher of children he organized a teachers' class to study his theories. He was warmly supported in this attempt, and the Swiss teachers remain true to him to-day.

The Kindergarten: Blankenburg.—While at Burgdorf, a friend had called Froebel's attention to the writings of Comenius. The "school of the mother's knee" as portrayed by Comenius made a deep impression on Froebel, and he slowly came to the conclusion that the educational reform most needed was for children before the usual school age. It was with this idea in his mind that he returned to Keilhau and in 1837 founded a "school for little children" in the neighboring town of Blankenburg. In 1840, after long pondering, he finally hit upon the beautiful and suitable name of "kindergarten" for his school.

Although the school had to be closed presently, Froebel, faithful to the cause of childhood, devoted the rest of his life to writing pamphlets and delivering lectures on his kindergarten ideals, to the better selection of kindergarten materials, and to the training of young women for the work of teaching in kindergartens. Unfortunately, the Prussian Government, confusing his teaching with the revolutionary doctrines of his nephew Karl Froebel, prohibited the establishment of kindergartens in 1851. This blow probably shortened his life, for he died the next year. The order was not revoked until 1860, nor has the Prussian state officially recognized the kindergarten up to this day, although private kindergartens are no longer prohibited. Now that the world knows the full length to which autocracy may go in its determination to crush democracy, it also knows why Prussia would not tolerate such exaltation of the individual as Froebel's ideals contemplate. It is through the Baroness Bertha von Bülow, as much as through himself, that Froebel's kindergarten lives and that it has accomplished so much for education.

Principles.—As the interpreter of his illustrious forerunners, Froebel made several very distinct contributions to the cause of education.

Development as Aim.—Like Rousseau, with whose naturalism the psychological movement began, Froebel advocated "education according to nature," thus assuming that education must have for its primary purpose the natural development of the individual, the evolution of inborn capacities and powers; but his deep-seated conviction that God reveals himself to the individual through nature, and that the outline of the course of human development in accordance with divine purpose must be kept clearly before the mind of the teacher, lifts Froebel God-high above the extremes of Rousseau's naturalism, and ranges him with Richter, Kant, and Herbart as the champions of emphasis on the religious and moral side of human development.

Method of Development.—Froebel, like Rousseau, recognized that the satisfaction and pleasure which activity, or motor-expression, affords the child is nature's own best stimulus to self-activity, and that accordingly the activities through which we hope to develop, or educate, the child must be as largely self-determined as possible. The play of children is evidently nature's first provision for their education.

Realizing as he did that the child by nature acquires an astonishing amount of knowledge through effort put forth to satisfy his desires, Froebel came to the conclusion that the sense-perceptions upon which Pestalozzi based all instruction acquire full efficiency only through the correlation of expressive action with acquisitive action, and that the effort to express knowledge should consist not only of words but also of such actions as gestures, songs, and material constructions. In other words, we must not only require the learner to prove by doing, and to put into use acquired knowledge, as the Herbartians do in the fifth step of instruction, but also perfect the learning process through doing, and so much so that the learning process consists more largely of doing than of anything else, for this is nature's own best way.

Participation.—Froebel rises immeasurably above Rousseau in the realization that the nature of the child calls for co-operative action rather than for isolation of the individual, that there is really a mechanism of instincts which calls for such social participation, and that the highest physical, moral, and intellectual development are definitely dependent upon such participation. In this conviction Froebel is as much of a psychologist as Aristotle and as human in his sympathies with childhood as Pestalozzi, his great pattern.

Embodiment.—The kindergarten at Blankenburg was Froebel's embodiment of his principles of education. The means which he organized to carry out his purposes are "Mother Play and Nursery Songs," the "gifts," and the "occupations." "The [fifty] songs

describe simple nursery games like hide-and-seek, or the imitation of some trade like the carpenter's," and are accompanied by pictures and explanatory notes. The "gifts" consist of materials that attract attention and the desire to use them, namely, the sphere, cube, cylinder, sticks, tablets, etc., while the "occupations" consist of materials that are capable of transformation in use, like sand, clay, paper, cardboard, etc. The plays to which the use of the gifts and occupations lead become miniature social and moral exercises as well as highly effective intellectual operations. The modern organization of the kindergarten emphasizes the occupations above the gifts, since the former afford a better selection of materials and activities. In the actual conduct of kindergarten activities, songs, gesture, and constructions are correlated as much as possible.

Froebel's Influence.—It is really difficult to give proper credit to reformers such as Rousseau, Pestalozzi, Herbart, and Froebel because such credit belongs to them jointly.

Play.—Froebel's principles of education as embodied in the kindergarten, supported by "the new psychology which predicates feeling and action as primary elements of mind, and intellect as a product of their interaction," has compelled a general reorganization of education not only in primary schools but also in secondary and higher institutions, in all of which play has become an integral portion of the curriculum, and the hope of social and moral as well as of physical reform.

The Hand in Education.—Rousseau advocated handwork, and wanted everybody to learn a trade, but for social and economic reasons. Pestalozzi endeavored to heighten the efficiency of sense-perception through industrial occupation, but with instruction rather than development as the end in view. Froebel, differing from both in purpose, advocated hand-work for its cultural value, or for the increase of mental power which it was to produce. It was with this end in view that he had proposed to establish a manual-training school at Helba, Germany. This idea of correlating hand-work with head-work as practised in the kindergarten was the definite beginning of the numerous schemes of manual training that have become integral in the educational systems of Europe, America, and elsewhere in the world.

Kindergartens.-Through Baroness Bertha von Bülow kindergarten ideals and methods have largely modified the "infant schools" of France and England, which, up to the middle of the nineteenth century, were only day-nurseries for the children of parents hard pressed by economic conditions. Through Doctor William T. Harris, until lately United States Commissioner of Education, who gave the kindergarten a place in the St. Louis schools, and through Miss Susan Blow, who seconded his efforts, and established a training-school for kindergartners in St. Louis, kindergartens have become a part of the educational scheme in the United States. This result was greatly hastened and enlarged by Miss Elizabeth Peabody, of Boston, Mass., who opened the first kindergarten for Englishspeaking children in 1860.

General Infiltration.—The whole scheme of modern education has become infiltrated with Froebelianism. This is particularly true of America. Among the men to whom special credit is due for these results is Colonel

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Francis W. Parker (1837–1902), principal of the Cook County Normal School, Illinois, who introduced the Pestalozzian method of teaching geography and the Herbartian idea of concentrating the curriculum about a central study, in this case geography, and who insisted in season and out of season on Froebelian motorexpression and social participation as the best means in the development of thinking power and character. Undoubtedly Doctor John Dewey's "new psychology" has greatly added to the power of the general psychological movement in pedagogy.

Estimate.—The psychological movement beginning in Rousseau's extreme naturalism was generally fortunate in its interpreters, for through them the pendulum was swung back from emotional to institutional individualism, and although the stress which these interpreters have put upon method has often hardened into formalism and soft pedagogy, there is now no real conflict between the claims of the social whole and the individual on the one side, or between both of these and the higher claims of God on the other side.

REFERENCES

- 1. Myers' "General History."
- 2. Lord's "Beacon Lights of History."
- 3. Monroe's "Cyclopedia of Education."
- 4. Quick's "Educational Reformers."
- 5. Graves' "Great Educators of Three Centuries."
- 6. Barnard's "German Teachers."
- 7. Krusi's "Pestalozzi."
- 8. Pestalozzi's "Leonard and Gertrude."
- 9. Barnard's "Pestalozzi and Pestalozzianism."
- 10. Parker's "History of Modern Elementary Education."
- 11. Williams' "History of Modern Education."

- 12. Kriege's "Friedrich Froebel."
- 13. Froebel's "Education of Man."
- 14. De Garmo's "Herbart and the Herbartians."
- 15. Lange's "Apperception."

QUESTIONS

I. What two contending ideas came into sharp collision through Rousseau, and what did Pestalozzi, Herbart, and Froebel contribute to the new movement?

2. What were the educative influences which help to account for Pestalozzi's philanthropinism?

3. Account fully for his presence at Neuhof, Stanz, Burgdorf, and Yverdun, and examine his achievements in these situations very carefully.

4. State fully the great principles of Pestalozzianism, and bring each one to the test of psychology and sociology.

5. Account for Fellenberg and examine his Pestalozzian experiment at Hofwyl. What does the world owe Fellenberg?

6. Which movements inspired by Rousseau and inaugurated by Pestalozzi have acquired great momentum? Where? Through whom? With what results?

7. What were the educative opportunities of Herbart before he became a tutor himself? How did his career as a tutor contribute to his future? How did Pestalozzi contribute to the same result?

8. Account for his presence at Königsberg, and explain his work there.

9. Explain the twofold ascent which Herbart proposed, and judge the fitness of this scheme as means to end.

10. Account for the laborious investigations carried on so many years. At what important conclusions regarding the construction of a curriculum did he thus arrive? Why was Doctor Eckhoff right in calling Herbart's "apperceptive" correlation "educative instruction"?

11. Explain the formal steps to which later Herbartians have tried to reduce all complete instruction.

12. Explain the contributions of the Herbartians Ziller and Rein to the cause of pedagogy. To what extent has their at-

tempt to reconcile the requirements of apperception with biological recapitulation succeeded in practice?

13. Place Froebel with the other great contributors to the psychological movement.

14. For which of his views do his home, early school-days, life in the forest, and his experience as a soldier, account? Through whom did he discover himself and what does he owe to Pestalozzi? What holy mission had he proposed to himself and what higher knowledge did he seek?

15. Describe the activities of Froebel and his associates at Keilhau, and his subsequent trials. Why did he return to Keilhau in 1837, and what does the world owe to him as a consequence?

16. Account psychologically and historically for the attitude of Prussia toward Froebel's kindergarten.

17. What did Froebel believe to be the ends in view in education, and how were these ends to be attained? Examine his ideas on "motor-expression" and "social participation" in the light of present knowledge.

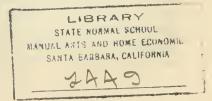
18. What were the "gifts" and "occupations" which Froebel used in his kindergarten, and to what extent have they stood the test?

19. Describe the place "play" has come to have through Froebel's influence.

20. What, according to Froebel, is the function of the hand in education? Compare these views with those of Rousseau, Pestalozzi, and later thinkers.

21. Trace the spread of Froebelianism into the twentieth century, and give proper credit to its celebrated interpreters.

22. To what extent has Froebelianism justified itself? Consult the last chapter for help in your decision.



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CHAPTER XVII

PRESENT NATIONAL SYSTEMS OF EDUCATION

THE SOCIALIZING MOVEMENTS

The wars through which the English Stuarts and the French Bourbons finally lost their thrones, and through which other powers contended for political supremacy, as in the rise of the Hohenzollerns, reduced large portions of the social whole to helpless conditions of poverty, hopelessness, and vice.

Philanthropy.-Although in this course of events the church suffered much herself and lost much of her teaching and alleviating power, she still continued to be the hope of the hopeless. The principle of the fatherhood of God and the brotherhood of man continued to have power enough to produce individuals and associations that were ready to make themselves the responsible stewards of the less fortunate classes. This spirit of philanthropy sometimes manifested itself in men who were not wholly in sympathy with orthodox Christianity, as in the case of Rousseau, but is seen to the best advantage in such devoted Christians as Pestalozzi. The general outcome in the last part of the eighteenth and the first half of the nineteenth century was rescue movements of large proportions-noble efforts to make the helpless classes beneficiaries of education and of all the good things that come through education. Thus arose charity

schools for the poor, Sunday-schools for the moral uplift of the ignorant, infant schools for children who through the pitiless industrial conditions would otherwise have become a burden to themselves and the social whole, schools for moral delinquents and mental defectives, and by and by, as in America, schools for dispossessed Indians and emancipated slaves.

While it is true enough that the philanthropists could not cope successfully with all the actual needs of the century in question, their experiments in time induced the state, as the only social whole powerful enough to achieve success, to make itself the responsible steward of all classes.

Patriotism.—The century of European revolutions, covering more than the last half of the eighteenth and more than the first half of the nineteenth, left a number of great monarchs securely in possession of their thrones, while the rest were either compelled to compromise with their subjects or to bow to defeat, thus making democracy possible. All these political movements, powerfully affecting social wholes, called for educational systems that would foster patriotism and produce efficiency.

In some cases, conspicuously in Prussia, the Hohenzollerns succeeded not only in making absolutism tolerable but even acceptable. This was accomplished primarily through the creation of a powerful standing army, making territorial conquest and defense against encroachment possible, and thus producing a strong feeling of nationality; but these far-sighted and ambitious sovereigns early realized that absolutism cannot be made permanently acceptable to the social whole by anything less than the general uplift of the social whole, and that the best means to this end was free, compulsory, and universal education, which, through its beneficence, would in time produce personal attachment to the rulers and thus conserve their ambitious sovereignty through genuine patriotism.

Efficiency.—The creation and maintenance of militarism, defensive and offensive, in European nations, called for general efficiency as well as for patriotism. The systems of education which would serve as means to the ends must therefore train the social whole not only for patriotic citizenship, whether it be in kingdoms and empires, or in self-governing republics like France, and in such constitutional monarchies as England and Italy, but also for competitive efficiencies that would make national existence safe and prosperous in times of peace as well as in times of war.

Such competitive efficiency can come only through systems of education in which the curriculum, the teaching forces, and all pedagogical equipment are subsidized to the ends in view. To support the crowded populations of European countries the educational curriculum must include scientific agriculture, forestry, mining, etc. The movement of the rural population to the cities through such inventions as the steam-engine, the cotton-gin, etc., calls for vocational education. In the interest of national wealth and competitive superiority stress must be laid on the training of engineering experts, industrial experts, and commercial experts. Continuation schools must follow the boys and girls into their vocations. In monarchies, military and professional training must be jealously guarded as the prerogatives of the ruling houses. In order that education may have the valuable quality of efficiency, the teaching forces must be professionally trained. The highly complex organization which has become more and more necessary in the adjustment of educational means to educational ends has given rise to a number of strongly centralized national systems of education.

GERMANY

The German states, gradually grouping themselves around Prussia as the political nucleus, have all become affiliated with her in educational matters, so that we should begin with Prussia in order that through her systems as a type we may obtain a definite general view of the German system as a whole.

The Hohenzollerns.—The Hohenzollerns, who accepted the Reformation of the sixteenth century with its philanthropic interests, saw from the beginning, so it now appears, that these philanthropic interests would sooner or later become a serious menace to Hohenzollern political ambition, and that therefore the social whole must be weaned from control by the church to control by the state, and that this must be accomplished through education. While, therefore, in order to attach the social whole to themselves, the Hohenzollerns inaugurated and furthered social-welfare movements through education, they contrived to make each new reform a stepping-stone to greater political power.

Frederick William I.—The first efficiency move of this sort was made by Frederick William I in 1717. In that year he issued a decree requiring parents to send their children to elementary schools. Nor did he stop at that, but even devoted state funds to the establishment of rural schools, and when he found it difficult to secure intelligent teachers, he founded the first training-school for teachers. It was located at Stettin. None of these efforts betrayed any open opposition to the church as a teaching force.

Frederick the Great.-His son, Frederick the Great (1740-1786), was an enlightened despot who saw that the more he could do for the general uplift of his people the more efficient a tool they would be in his hands in the achievement of his ambitions. He therefore made many economic and social reforms that looked to the advancement of the social whole, and gave much attention to educational reforms. He improved the secondary schools, granted academic freedom in universities, and established an academy of science in Berlin, and, by leaving the administration of the schools in the hands of the clergy, he accustomed them to submit to state control without alienating them from his cause. His great contribution to the cause of elementary education was the general school regulations which he issued in 1763. In this code (1) school attendance was made compulsory from the age of five years to thirteen for those who could pass the state tests, and fourteen for those who were less fortunate. (2) No one was allowed to teach school without being examined and licensed by a local inspector and preacher. (3) And the schoolmaster was required to give part of his Sunday to teach young unmarried people who were beyond the school age.

Frederick William II.—It was the cherished hope of Baron von Sedlitz, the educational adviser of Frederick the Great, to improve the administration of schools by creating a central board, thus disposing of the local church consistories and their freedom from state control. The new board was to consist of lay members. Frederick William II established a central board in 1787, but, finding it either inopportune or impossible to defy the church and her traditional prestige, he refused to go the whole length of substituting lay experts for churchmen in the membership of this board, nor did he extend the jurisdiction of the central board to higher education.

In the meantime the scholars and jurists whom Frederick the Great had appointed to codify Prussian laws completed their work. This was in 1794. "The twelfth chapter of laws" was devoted to education. The advocates of supreme control by the state had triumphed. It was now openly asserted that "all schools and universities are state institutions, which may be founded only with the knowledge and consent of the state; they are under the supervision of the state and at all times subject to its examination and inspection." The code also provided for compulsory attendance and the appointment of teachers by the state. Religious instruction was not to be eliminated from the schools, but, with this one concession to comfort her for her loss of power, the church was henceforth to surrender all administrative function to the state. The social whole, moved by traditional sympathy, and tacitly encouraged by the clergy, was sure to resent the new order of things, and this resentment was not mollified by the corrupt and selfish administration to which the people were subjected by the minions of the king.

Rude Awakening.—In 1806, as we should recall at this point, Napoleon humbled Prussia at Jena. Ruler

and people were suddenly face to face with stern realities. Reforms of every sort were instituted. The great men with whom Frederick William II now surrounded himself saw that what Prussia needed most was an educational system that would produce intelligent patriotism. This was the psychological moment. The social whole, together with the church, would now be ready enough to submit gracefully to any system of centralization in school administration. The central administration was created within the Department of the Interior and the illustrious Wilhelm von Humboldt was placed in charge. He inaugurated reforms in elementary, secondary, and higher education that went far toward the eventual completion of a state system that would serve the ambition of the Hohenzollerns. In 1800 the University of Berlin was founded, and, through the eminent scholars invited as teachers, it soon became, what it has long continued to be, a great research university. In 1812 the classical high schools, which fell in line with the curriculum prescribed by the state, including emphasis on Greek and mathematics, thus preparing for admission to the universities, took their definite place in the educational system specially planned for the training of civil-service experts, and were called "gymnasiums."

In order to prepare efficient teachers for the gymnasiums, pedagogical seminaries were established in all the Prussian universities. In the same way Pestalozzian teachers, trained in Pestalozzian normal schools, became the requirement in elementary schools.

In 1817 the Bureau of Education founded ten years before became a separate ministry, and in 1825 provincial school boards responsible to the ministry were organized, and it was hoped that this provision would gradually eliminate all ecclesiastical domination over education. From that time on, up to the Franco-Prussian War, it was the policy of the government to eliminate all such individual initiative in education as might result from Pestalozzianism, and the rights of the social whole to such practical studies as geography, history, and science were largely ignored. The climax to this despotism in education came in 1848 when, in the reign of Frederick William IV, after the demand of the people for a more liberal constitution, kindergartens were prohibited as revolutionary institutions and all liberalism in university professors was looked upon with suspicion.

The Later Hohenzollerns .- After the revolution of 1848 the educational reforms of Prussia, in response to the increasing commercial and political rivalries between the Hohenzollerns and the Hapsburgers, became intensely practical and nationalistic. In order to make the Realschulen as well as the gymnasiums feeders for the scientific and technical courses offered in the universities, Latin was incorporated into the gymnasiums in 1859 and the course lengthened to nine years, thus making these gymnasiums Latinscientific schools of a high order. After the triumph of Prussia over Austria in 1866 and over France in 1871. and the formation of the German Empire with Prussia as the dominating centre, the gymnasiums still furthered the interests of a nationalism that amounted practically to idolatry. The late Emperor William became the voice of this "kultur" ideal. Said he in 1890 to the Berlin School Conference: "First of all, a national basis is wanting in the gymnasiums. Their foundation must be German. It is our duty to educate men to become young Germans and not young Greeks and Romans. Hence we must make German the basis around which everything revolves." Nationalism now began to mean pan-Germanism. The German people, including the clergy, must henceforth make efficiency through education by the state for the state their supreme concern.

Elementary Schools.—The German elementary schools are intended for the children of the masses who are destined for mechanical pursuits, and are therefore properly called "Volksschulen" (schools for the people). They are free to all, both boys and girls, and compulsory from the age of six to fourteen. The curriculum includes reading, writing, singing, drawing, geography, history, and religious instruction. In Protestant Germany the pupil is confirmed by the church at the end of the eight-year course. If the child is to be transferred from the Volksschule to any one of the three kinds of high schools, it must be done at the age of nine. The teachers of the Volksschulen are professionally trained, and must hold state certificates, which entitle the holder to permanent positions. About fifteen per cent of the teachers are women.

Secondary Schools.—There are three kinds of high schools in Germany, namely, the gymnasium, the realgymnasium, and the realschule. They are all alike in organization, administration, methods, and discipline, but differ from each other in curriculum.

The gymnasium is the classical high school of Germany, making Latin and Greek the fundamental studies and formal discipline the aim. It is specially intended for the sons of the German aristocracy and professional classes, and graduation gives these privileged classes high prestige. Besides Latin and Greek, together with the usual correlatives, the curriculum includes French and English, mathematics, science, and religion. The pupil is entered at the age of nine, either from the Volksschule—which is exceptional—or from a "Vorschule" (preparatory school), and remains for nine years, when he is ready for the university. The teachers are specially prepared by university "Seminars" (university normal schools), and hold their positions as government officials.

The real-gymnasium is the Latin-scientific high school of Germany. It has Latin in every year, but substitutes French and English for Greek, and gives much attention to science and mathematics. Graduation from the real-gymnasium prepares the student to enter the scientific and technical courses in the German universities. The social prestige which graduation from the real-gymnasium guarantees is not equal to that of the gymnasium.

The realschule is a six-year high school from which Latin and Greek are both omitted. French, however, is taken up from the beginning. In other respects the realschule is very much like the real-gymnasium in its curriculum. Graduation does not lead to the university but to practical vocations, and shortens compulsory military service from two to one year.

Various attempts have been made since 1878 to overcome the difficulty of transfer from one kind of high school to another. These attempts have produced "reformed" high schools that seem to serve the purpose, and they are growing in number.

Since 1908 the Prussian Government has organized

secondary schools giving girls practically the same opportunities as boys. These opportunities include normal schools, from which they usually graduate at twenty, and are then permitted to teach not only in the Volksschulen but also in the lower classes of secondary schools.

Higher Education .- Germany, owing to competition between states, has many universities. They have now all been acquired by the state or come into existence by state permission. They charge fees, but are supported chiefly by the state, and under the direct control of the minister of education. This official appoints the professors, but takes counsel with the faculty. Representatives from the different faculties annually elect a rector as head of the internal administration but he must be confirmed by the minister of instruction. The traditional division of the teaching forces into faculties of law, medicine, theology, and philosophy is still honored. Most of the new subjects under the head of science, sociology, and literature are placed under the faculty of philosophy. The German universities permit elective courses and academic freedom except in theology. Women are also admitted since 1908. Technical high schools of university rank have lately sprung up, and devote themselves especially to education in agriculture, forestry, mining, engineering, and commerce.

Estimate.—The Hohenzollerns of Prussia have succeeded in organizing a state system of education in which the means are selected with pitiless accuracy for the one end in view, namely, the ambitious aggrandizement of a ruling house. In order to succeed in this ambition it was necessary to subordinate the claims of God and the rights of man to a system of might. The Hohenzollern frightfulness with which the civilized world has become so familiar in these last years shows that a system of education which does not make for righteousness and justice, for human liberty and humanity, is a curse in spite of the pathetic obedience to which blind patriotism may follow the god of military efficiency.

FRANCE

Up to 1789, when the revolution through which Louis XVI lost his throne began, the dominant purpose in French education was religious, and the general administration of schools was in the hands of the teaching congregations, the Christian Brothers having become more than the successful competitors of the Jesuits and other orders—and all this in spite of the powerful influence of rationalism as propounded by the cyclopædists and of naturalism as championed by Rousseau.

Infant Schools.—That the educational activities of the church were prompted not only by the narrowing interests of denominationalism but also by the broadening interests of philanthropy appears in such attempts as those of Pastor Oberlin. Jean Frederic Oberlin was a young Lutheran pastor whose charge in eastern France had been ravaged by war. Oberlin conceived the idea of giving some training to the very young children of the villages belonging to his charge. Thus arose toward the close of the eighteenth century the so-called "infant schools" of France. They were day-nurseries into which physical exercises, singing, drawing, and other kindergarten exercises were woven. In 1801 the system was brought to Paris, in 1833 the infant schools became a part of the national system of schools, but since 1881 they have been known as "maternal schools." Although in the French system they are the substitute for the kindergarten, the kindergarten aim of development is subordinate to the Pestalozzian aim of imparting knowledge.

The National Convention.—The great leaders of the "national convention" felt that the perpetuity of the republic which they had called into being in 1792 could be assured only by the establishment of a national and lay system of education, and, moved by this conviction, they gave much attention to reports and bills relating to the matter. The outcome was an order to establish elementary schools throughout France, and to make attendance compulsory; but the Reign of Terror and the Wars of the Directory followed, so that, apart from the establishment of the normal school and the polytechnic school at Paris in 1793, almost nothing came of the proposed school system.

Napoleon.—When, as First Consul (1800–1804), Napoleon began the great work of reconstructing and reforming France, and thus to pave his way for empire, he saw with marvellous keenness that in order to secure and complete the social results of the revolution, education was the means to the end, and that in order to heal the breach which the national convention had made between the church and the state, the clergy must be recognized in all his restorations and reforms. Accordingly, in connection with the codification of laws which he intrusted to famous jurists, he planned a school system worthy of his great mind.

After abolishing the autonomy of the universities, most of which had become moribund, and after reducing all of them except Paris to mere groups of faculties whose work it should be to grant degrees, he united all secondary and higher institutions into one corporate body to be controlled by the state, and called it "The University of Paris." Inasmuch as the spokes of this corporate body were to radiate into every part of France, he divided the country into twenty-seven administrative "academies," or sections, committing the administration of the educational affairs of each academy to a rector and an academic council, a plan which remained in force until 1875. The church, however, as already intimated, was permitted to assume control of elementary education and special favor was shown to the Christian Brothers, whose schools had been suppressed in 1792.

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The Restored Bourbons.—Louis XVIII (1814–1824) and Charles X (1824–1830), the restored Bourbons, believing that it served their interests as despots to conciliate the church as much as possible, continued the policy of permitting the teaching congregations to assume control of elementary education, and Louis XVIII promptly put even the control of secondary and higher education into the hands of a priest, Freysinous by name, who was known to be opposed to state control of education.

Louis Philippe.—The July revolution of 1830 gave France a "citizen king," Louis Philippe (1830–1848), through whom the social whole of France began to come to its own not only politically but also in the vital matter of elementary education. His celebrated minister of public instruction, Guizot, promptly began

to agitate the question of popular education, and it was through him that the foundation of the present educational system of France was firmly laid in the law of 1833, the passage of which he secured. This law established two grades of elementary schools, a primary school for every commune, or district, and a higher primary school for every commune of six thou-sand inhabitants. The state was to bear the financial burden of these schools completely, except that a small fee was required on the part of pupils who could afford it. The appointment of teachers was vested in the state, and, for the sufficient supply of qualified teachers, about thirty department normal schools, not coeducational, were created. The church had thus lost control of popular education, but, to compensate the social whole for this loss, provision was made for freedom of religious instruction. The plan for higher primary schools never came to full fruition, but much progress was made in Louis Philippe's reign in the establishment and pedagogical conduct of the primary schools. Guizot was a veritable inspiration to the teacher. He addressed to them the beautiful words: "I know full well that the law will never succeed in rendering the simple profession of district teacher as attractive as it is useful. Society cannot make a sufficient return to him who is devoted to this work. . . . It is his glory to pretend to nothing but his obscure and laborious condition; to exhaust his strength in sacrifice scarcely noticed by those who profit by them; in a word, to labor for men, and expect his reward from God alone."

Louis Napoleon.—Under the Second Republic (1848-1852) the school laws of France were extensively revised in 1850, but when this Second Republic gave way to the Second Empire (1852–1870), the old hope of healing the breach between the church and the state resulted in a large restoration of denominational primary schools in preference to state-controlled primary schools.

Third Republic.-When in 1871 France for the third time became a republic, the great leaders, with Gambetta at the head, determined to establish universal education, not simply because it was better for all classes of the social whole and the individuals who constitute the social whole, but especially also because it was essential to the perpetuity of the republic. And, inasmuch as only the state, that is the organized representative of the social whole, could be intrusted with so vast a task, education must be secularized in the administration of all its departments. The central administration was accordingly intrusted to a minister of public instruction, who should be assisted by special directors of primary, secondary, and higher education. The academies into which France was divided are each supervised by a rector supported by an academy council in charge of the three fields of education. The teachers, however, are appointed by a so-called "prefect," a political appointee. To guarantee the faithful performance of all functions, the republic maintains a complete corps of state, academy, and district inspectors, assisted by local school committees. In short, the republic has made itself responsible for practically everything in the administration of French education-appoints the teachers, provides a pension system for teachers, controls the curriculum and methods of education, and, when private instruction is permitted, safeguards the public interests by state supervision. This ambitious system was put into pretty complete operation between 1871 and 1881, when millions of francs were spent in the erection of school buildings and for equipment, provision being made among other things for manual training and technical education as public necessities. In 1881 every commune had a primary school; in 1882 attendance was made compulsory between the ages of six and thirteen. Every department (county) was required to provide a normal school for teachers of both sexes. After 1886 clergymen were no longer allowed to teach in the public schools. In 1901 a bill was passed requiring all denominational secondary schools to catalogue their purposes and activities, and thus to put themselves under state control. This "Law of Associations," aimed especially at the religious orders, aroused much opposition, and led to the closing of all such schools in 1902 and 1904. There is, therefore, now a complete separation of church and state in French education.

Elementary Schools.—Since 1833, through Guizot, the primary education of the French child may begin at the age of three in the maternal or mother's school, or French kindergarten. From six to thirteen the children of both sexes are required to attend a primary school, in which reading, writing, drawing, language, nature, geography, history, civics, morals, singing, physical culture are taught. A higher primary course of three years, of a more practical and vocational nature, is provided for children who can remain in school longer than the prescribed time. Agricultural and industrial continuation schools are also to be found in various communes, supported by the communes under state supervision. Coeducation is not permissible in the French elementary schools, except where it cannot well be avoided.

Secondary Education.—There are two kinds of high schools in France, namely, the lycées, or national whigh schools, and the communal colleges.

The lycées are supported in part by fees, but chiefly by the state. The pupil enters at the age of ten, usually by transfer from the primary school, and may elect at once whether he will spend the first four years on the classics, or on science together with mathematics and the modern languages. At the end of the "cycle" of four years he is permitted to change his course for the next two years, making up any deficiencies which the change may require. Regardless of the course pursued up to that point, the French boy is permitted to devote his seventh year specially either to a philosophic course, including literature and the social humanities, or to a scientific course, with stress upon mathematics, either course leading to a "bachelor's degree."

The communal colleges, which are local schools supported partly by fees, but chiefly by the commune, and with some help from the state, offer courses similar to those of the lycées, but do not have the same social prestige, and the professors are not subject to the same high requirements for appointment.

Up to 1880, when the law created lycées and communal colleges, French girls who wished to secure a secondary education were usually obliged to obtain it in convents and private schools, but the secondary schools then created for girls have grown steadily in number and popularity. These lycées for girls offer only a five-year course, exclude the classics from the curriculum, and put great stress on domestic economy, drawing, music, and morals, together with courses in mathematics and science. As a rule, only women are allowed to teach in the lycées for girls, and these must be graduates of higher normal schools especially established for the purpose, as in the case of teachers for the lycées for boys.

Higher Education.-The subordinate position to which the Napoleonic reorganization of university faculties had reduced these institutions of higher education was not seriously corrected during the nineteenth century. In the year 1885, however, a law was passed to organize a governing council, to co-ordinate the faculties, and to hold property as corporate bodies. In 1806 the separate faculties of law, medicine, science, and letters were reorganized into full universities, that is, universities each having the above four faculties, supported and controlled by the state. Such complete universities were planned for each of the sixteen academies except one. Eight of them have now been fully organized. The minister of instruction appoints the professors, who are nominated by the joint action of the faculties, and receive their salary from the state. The internal government of a French university is vested in a council consisting of faculty deans and headed by a rector. All French universities are open to women as well as men, and they admit students from other countries. Numerous professional and technical institutions of a high order complete the system of French higher education.

Estimate.—The striking feature of the French system of education is the uncompromising, almost pitiless, secularization of the system, the logical result of the long struggle for supremacy of the church over the state ending in favor of the state. It is much to be doubted whether the final result to the French social whole and the highest interests of humanity will justify the divorce of religion from civic and moral instruction, and the time may come, perhaps as a result of the late tragical conflict with the brute force of Prussianism, when France will give religion its proper place in her school curriculum and her teaching force, and that, too, without bringing back the evils of any denominational bitterness. In all other respects the liberality, humanity, and wisdom of the French system make France akin in spirit and purpose with the United States, as she is in history of human rights.

ENGLAND

The traditional conviction that education should really be a function of the church rather than of the state, and the additional conviction of upper-class English people that the lower class should serve rather than think, prevailed longer in England than elsewhere. During the seventeenth and eighteenth centuries, indeed, the Established Church limited her educational activities almost wholly to secondary and higher education, thus pandering almost slavishly to the conservatism of the English aristocracy. We should therefore not be surprised to find that the English Government assumed no official responsibility for the education of the submerged social and industrial classes much before the middle of the nineteenth century. In the meantime, however, as early as the beginning of the eighteenth century and all through the century, the abject helplessness of the poor and ignorant produced philanthropists and philanthropic organizations that believed what the educational reformers of other countries advocated, namely, that all classes of the social whole should become the beneficiaries of education not only because it is better for each class but also because it is best for the social whole, and who therefore organized movements, philanthropic and experimental, through which in time the state as the only efficient and representative organism of the social whole was compelled to pay attention. It was thus that in the nineteenth century the English Government, like Germany, France, and the United States, gradually and finally assumed the responsibility of universal, free, and compulsory education. Among these movements, as stated before, were the charity schools, the Sunday-schools, the monitorial schools, and the infant schools.

Charity Schools.—Some charity schools were established as early as the close of the seventeenth century; but, at the beginning of the eighteenth century, a group of philanthropists, moved by compassion and a sense of moral responsibility, largely inspired by the Reverend Doctor Thomas Bray, organized a "Society for Promoting Christian Knowledge," whose object it should be to found schools through which poor children might be made "loyal church members, fit for work in that station of life in which it hath pleased their Heavenly Father to place them." In other words, instruction in religion and morals, together with reading, writing, and arithmetic of an elementary nature, was to be supplemented by training which would fit boys for apprenticeships in the trades and girls for

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domestic service. In practice, the children received not only instruction and books but also in many cases food and clothing.

The success of the society was phenomenal. In spite of opposition from the upper classes, who feared that such education would spoil the lower classes, it was not difficult, as a rule, to enlist local help in the establishment, support, and management of the schools, for the society on its part took pains to safeguard the religious, moral, and pedagogical fitness of the teachers, and guaranteed stipends for its treasury in case of great need. In half a century the number of the charity schools in England and Wales had grown to more than two thousand, attended by more than fifty thousand children. Although the initial impulse gradually lost its force, the charity movement continued all through the eighteenth century, until it was absorbed early in the nineteenth century by the "National Society." Through an offshoot from the parent society known as the "Society for the Propagation of the Gospel in Foreign Parts," founded by Doctor Bray three years after the parent society, the church school movement was carried into the American colonies, where, as we shall see, it became a most important forerunner of our free schools.

British Sunday-Schools.—In 1780 Robert Raikes, a manufacturer of Gloucester, England, believing that the squalor and vice of the city were largely due to the ignorance of the poor, opened a school for the instruction of both adults and children in religion and the rudiments on Sundays. He paid his teachers a shilling a Sunday to teach the children to read in the Bible, spell, and write, and soon had a number of such schools in successful operation. In spite of opposition from the upper classes against this form of charity schools, Robert Raikes had warm supporters among the nobility and such reformers as John Wesley, and it was not long before the movement spread to London, and then all through the British Isles, and in 1786 to the American colonies. This rapid extension of the movement was due largely to the formation of a "Sunday-School Society" founded in 1785, and to its activity in distributing Bibles, testaments, and spellers. Within ten years one thousand Sunday-schools contained over sixty-five thousand pupils.

The Sunday-schools gradually abandoned secular instruction and the practice of paid teachers, and became purely religious institutions. Raikes and other promoters of the movement realized almost from the beginning that Sunday-schools in their attempts at secular instruction were only makeshifts. Nevertheless, like other philanthropic experiments, they really helped to pave the way for the larger measures of universal education not only in Great Britain but also in America.

The Monitorial System of Schools.—At the close of the eighteenth century a system of mutual instruction, long known among the Hindus, and best known as the Madras system, was inaugurated as a philanthropic movement in the British Isles, and carried from there into America and other colonies. The fathers of the movement were Andrew Bell and Joseph Lancaster.

Andrew Bell.—Andrew Bell (1753-1832) was a Scotchman, born and educated at St. Andrews, Scotland, of whose university he was a graduate. He resided in Virginia seven years. On his return he took

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orders in the Church of England, and was sent to Madras, India, to assume charge of an orphans' home established by the East India Company, to care for the orphans of English soldiers. There was a salary attached to the appointment, which, however, Doctor Bell refused to accept because unselfish benevolence had prompted him to undertake the work. When he found that he could not supply the kind of teachers most needed, he adopted the system of mutual instruction sometimes employed in Hindu schools. In other words, he selected the most capable pupils and taught. them the lesson which they, in turn, were to teach classes of less advanced pupils. From the very start he required the boys to do everything, so far as possible, for themselves. The plan succeeded beyond all expectations. At the end of seven years he found it necessary, on account of failing health, to return to England, where in 1797 he published an account of the experiment, which attracted much attention.

In 1807 he established a monitorial school in London. Many influential people, among them the clergy, became interested in the system. Thus arose the "National Society" through which the Church of England undertook to establish monitorial schools all over the British dominions. The work prospered greatly under the management of Doctor Bell, and in less than ten years one thousand schools were established, with more than two hundred thousand children in attendance.

Joseph Lancaster.—In 1798 Joseph Lancaster, an English Quaker, then only twenty years old, opened a school in Southwark, London, to help as many of the barefoot, unkempt children of that unhappy part of the city as possible to an education that would do

them real good. He soon had a hundred pupils in this school. Like Bell at Madras, of whose work he did not then know, he hit upon the monitorial system of supplying the necessary assistant instructors, and, like Bell, succeeded beyond all expectation. Powerful support made it possible for him to erect a schoolhouse in which in 1805 he had under his care about a thousand children. The experiment attracted George III (1760-1820), who, on a visit to the school, was greatly delighted, and expressed the wish that every child in his kingdom might learn to read the Bible. Influential patrons and increasing subscriptions made it possible for Lancaster to found a normal school for the training of teachers in his system. His attempt to extend his system was a great success, but he became a bankrupt, and an association had to be formed in 1808 to save the cause. This organization, consisting of dissenters, and known as the "British and Foreign Society," continued Lancaster's work with much success. Lancaster himself withdrew from the society in 1818. and came to America to establish his system here. He died in 1838.

Estimate.—The monitorial systems of Bell and Lancaster opened the school-door to thousands of children who otherwise must have grown up in ignorance. The monitorial schools provided these children with a fair education in the elementary subjects, added some vocational and industrial training, and emphasized religious and moral instruction. That much of this monitorial instruction was injured by the drill mechanics which were necessary in the handling of large groups by monitors goes without saying, but it paved the way for better things. Through the rivalry which sprang up between the two societies to which the system gave rise, the national government began to realize not only the possibility of supplying teachers but also its official responsibility to educate the social whole, and thus step by step the present system of universal, free, and compulsory education came into being.

Infant Schools.—In 1816 Robert Owen, who had not heard of the French movement, established an infant school for the children of the operatives in his cotton factory at New Lanark, Scotland. The children were not to be "annoyed with books." They were to be taught about nature and common objects, but through familiar conversation and by means of models, paintings, maps, etc. In order that the education which they were to receive for about three years, beginning at the age of three, might include the body and morals as well as the intellect, instruction was combined with much singing, outdoor exercise, dancing, and other amusements. The experiment was a great success.

The plan was carried to London, where Samuel Wilderspin became the great exponent of the system. He unfortunately made his London school a small copy of what a school for older children usually attempts, thus resolving the experiment into the process of producing infant prodigies, in whose rather overcrowded curriculum the memory work left little room for real education. Even the games became stereotyped and religious instruction an empty form. He popularized the infant school through lecture tours, and organized new schools everywhere. This result was greatly hastened by the organization in 1824 of an "Infant School Society." About a dozen years later Reverend Charles Mayo founded in London an organization whose purpose it was to train infant-school teachers. This society, known as "The Home and Colonial School Society," grafted Pestalozzianism upon the infant school. This emphasis on object-lessons and the cultivation of the senses redeemed the infant school somewhat from the Wilderspin formalism, but failed to infuse the real spirit of Pestalozzi's spontaneity into the curriculum. The desirable result, however, was largely attained when in 1874, four years after the infant schools had become a part of the primary school system of Great Britain, some of the methods and games of the kindergarten were incorporated.

Present System .- The philanthropic movements inaugurated by Raikes, Bell, Lancaster, and others helped to wake an increasingly larger social whole to self-consciousness. This result was powerfully augmented by the gradual enfranchisement of the industrial classes which came about through the invention of the stationary steam-engine and labor-saving machinery and by the concentration of population in factory towns and coal and iron sections. The age-old conviction of the governing classes that the lower classes should be kept down to their place thus gradually gave way to the conviction that education was an inherent right of all men and that the social whole, through the government as the guardian of this social whole, must eventually assume control of education. Thus it came about that through much agitation the government began to appoint committees to look into conditions and possibilities, and that in reply to reports submitted it passed a series of bills through which the present system of English education was established. These bills generally closely followed the great reform bills through which new classes of the social whole were enfranchised. The Reform Bill of 1832, for example, was followed by a parliamentary grant of £20,000 a year, "to be distributed through the two religious educational societies, the National Society and the British and Foreign Society, for the sole purpose of aiding in building schoolhouses, for which subscriptions had already been collected." This method of distributing state funds through church societies really greatly retarded the growth of sentiment in favor of absolute state control. The matter was corrected in 1830, when the Victorian government appointed a special committee of the Privy Council on Education, which committee insisted that a school, in order to share in the government funds, must be open to government inspection. In 1870, after the great extension of the franchise of 1868, Parliament finally passed a bill by means of which a system of state-organized, state-supported, and state-controlled elementary schools was established. Among other things, this bill provided that wherever there was lack of school accommodation the voters of the community might elect a school board, whose business it should be to maintain an elementary school. The "board" schools thus established were to receive a government grant for their support, but an equal amount of money was to be raised by local taxation. The community church schools, supported by voluntary subscriptions, and therefore known as "voluntary" schools, were to participate in the government grant, but not in the money made up by local taxation,

and the government grant in both cases was to depend upon the report of government inspectors. Religious instruction, but not of a denominational character, was permitted, but for "conscience" sake had to be placed at the beginning or the end of the school day.

The compromise which permitted the denominational, or voluntary, schools to participate in the government grants, unfortunately perpetuated competition and thus serious bitterness. In 1899 a central board of education was established to take over the powers which had, up to that time, been rather awkwardly distributed.

The board schools, adding local support to government grants, grew rapidly in number, first because they were able to employ more and better teachers, and then, too, because the schools formerly supported by the British and Foreign Society found it easy to merge with them. The result was that in 1902 there were more pupils in the board schools than in the voluntary schools. The Established Church, alarmed by the serious possibilities to herself as the guardian of religion and morals, steadfastly continued to oppose absolute secularization. Her support of the policy of the Conservatives made it possible for the latter to push through Parliament in 1902 a measure whereby the voluntary schools were allowed to share the local rates as well as government grants with the board schools. The measure also provided for still more comprehensive national, county, and municipal control, but left a thorn in the side of the non-conformists by placing the supervision of individual schools in control of a local board of managers, to consist of two appointees by the county or municipal council and four selected by the denomination. The advantageous position in which this arrangement placed the Established Church aroused such resentment that the Liberals in 1904 tried hard to correct the defect, and, although the House of Lords rejected the bill which the Commons had sent up, further corrective legislation is altogether likely.

Present Elementary Education .-- The elementary education of an English child now begins with the infant school, which he may enter at the age of five years, and in which he may remain three years. Here, as already explained, he is engaged in Pestalozzian activities that have taken on kindergarten aspects, but he learns also the rudiments of reading, writing, and numbers. The infant school paves the way to the board or the voluntary school, as the case may be, where attendance continues to be compulsory up to the age of twelve, or, by the permission of the local board, up to fourteen. On the other hand, children engaged in agricultural pursuits may secure partial exemption from attendance after they are eleven years old, and those engaged in industries after they are twelve. The course of studies includes reading, writing, arithmetic, drawing, geography, history, physical culture, singing, and religion.

Up to 1900 many larger cities were permitted to establish higher grade board schools, in which courses were offered in competition with those of the endowed secondary "public," or grammar, and private schools. In response to protests, this matter was settled by fixing upon fifteen years as the upper age limit for pupils in these higher grade board, or "provided," schools. The additional three-year free curriculum puts emphasis upon vocational education in connection with the general subjects, and is intended for pupils who can remain beyond the compulsory attendance age. At this writing only a small per cent of the children remain for this course. On the other hand, large numbers of those who leave school at the end of the compulsory-attendance limit enter evening continuation schools, of which, however, there do not seem to be a sufficient number, for they bridge the way to the specialized schools of science and art maintained by special grants of the English Government.

It remains to add that some sixty normal or training colleges, all under government inspection, have been established to provide qualified teachers for elementary schools of all kinds.

Secondary Education.—Up to 1902 there was almost no provision made for the secondary education of the middle class and working people. The secondary education of the social élite of England, as Doctor Duggan puts it, has been in the hands of the endowed "public" and "grammar" schools, and of "private adventure" schools.

Public Schools.—The seven English "public" schools, namely, Charterhouse, Eton, Harrow, Rugby, Shrewsbury, Westminster, and Winchester, are all aristocratic boarding-schools, highly endowed and more than three centuries old. With them must be placed the famous day-schools, St. Paul's and Merchant Taylors' in London. They all prepare directly for Oxford and Cambridge, somewhat in the same sense as the gymnasiums of Germany and the lyceums of France prepare for similar universities, and, in spite of the fact that the mother tongue, the modern languages, and the natural sciences have been admitted into the curriculum, Latin and Greek still hold their own. Their efficiency, however, has been vastly improved by reforms beginning with Doctor Thomas Arnold.

Thomas Arnold .- Doctor Arnold was made head master of Rugby in 1828, and the reforms which he introduced there gradually permeated into the atmosphere of the other great schools. He set up new standards of excellence that have persisted through a long succession of masters. To begin with, Arnold made promotion depend not upon routine work but upon scholarship and merit as far as this was possible through examinations. He governed the boys not by force but by vigorous appeal to all that was best in them. In place of the brutal system of "fagging," which requires students of the lower classes to perform menial services for those of the upper classes, he introduced a system of responsible supervision by the upper-class men over younger boys, thus paving the way for what is now called "student government."

Grammar-Schools.—The grammar-schools of England, like the preparatory schools, are endowed private schools, scattered all over the country, many of them as old as the public, or preparatory, schools. Like the latter, they admit children anywhere between seven and ten years of age, and keep them in some cases until they are eighteen. The celebrated grammar-school at Stratford-on-Avon, where Shakespeare learned Latin, still remains the type.

Private Schools.—After the Reform Bill of 1832 secondary schools having a "modern side" to compete with the "classical side" sprang up in great number. They were founded in most cases by stock companies, as private enterprises, from which they take their name. These schools were practically the first secondary schools to provide for girls, and they have won much praise for excellency of curriculum and spirit. The Forster Education Bill of 1902 provided for the

The Forster Education Bill of 1902 provided for the establishment of secondary schools by the local authorities, thus accepting the modern idea that the public treasury should contribute not only to the support of elementary but also secondary and higher education. This support is now given to all secondary schools, private and public, which meet the requirements of the National Board of Education, and serves as a powerful stimulus. To receive this state support the school must comply with the rulings of the "board" on questions of curriculum, length of term, hours of attendance, and inspection. Twenty-five per cent of the students in the school receiving "grants" must come from the public elementary schools, and no religious test is allowed. More than a thousand secondary schools of England now receive such aid, about one-third of which are of the newer schools founded by local authorities.

Higher Education.—Among the most celebrated universities in the world are Oxford and Cambridge. "Their origin," as Doctor Painter puts it, "is lost in the darkness of the Middle Ages." Oxford comprises twenty-three separate colleges and Cambridge nine-teen. Each of the separate colleges has its own president, rector, or provost, while the general or university government is administered by a chancellor. These universities are maintained by magnificent endowments. Candidates for degrees must reside at the college for three academic years, and pass a satisfactory examination before a university board of examiners. Through the will of Cecil Rhodes, the English money-king of Africa, in which he provided for scholarships, students have for some years been admitted from foreign countries. The candidates for such admission must be able to pass rigid intellectual, moral, and physical examination conducted in their own country at set times by accredited examiners.

The University of London was created by royal charter in 1836. In 1901 it ceased to be only an examining body and became a teaching institution. This university is now a confederation of twenty-six colleges and schools, organized into eight faculties, including pedagogy, and all well articulated with municipal schools.

Oxford and Cambridge continued to merit the criticisms of Locke and Bacon almost up to the present. They are, however, yielding to modern pressure. Laboratory courses in science have been introduced, the granting of degrees is no longer conditioned by theological requirements, extension courses have been organized, and women are admitted.

After 1850 England encouraged the establishment of "municipal universities better adjusted to modern needs, progressive in spirit and purpose, granting degrees equally to men and women, and closely articulated with municipal public schools," and such universities have been established by Manchester, Leeds, Liverpool, Birmingham, and Bristol. They are supported chiefly by the cities, but also receive parliamentary grants and private bequests. The three colleges of Wales, namely, Aberystwyth, Bangor, and Cardiff, confederated in 1893 and became the University of Wales. Estimate.—The conservatism everywhere so pronounced in the slow process of educational reforms in England in the end proves an inestimable blessing. To it has been due the common coalition between the lords and the clergy in political crises when educational reforms would have been destructive revolutions, as in France, and this coalition of conservatives has saved the church as the guardian of religion from the stultifying humiliation to militarism, as in Germany. Moreover, the educational reforms of England, just because they have been less precipitate, have had a steadying influence in the evolution of colonial systems, as in America and Canada.

REFERENCES

1. Myers' "General History."

2. Klemm's "European Schools."

3. Prince's "Methods in German Schools."

4. Seeley's "The German School System."

5. Russell's "German Higher Schools."

6. Richard's "The School System of France."

7. Parson's "French Schools Through American Eyes."

8. Barnard's "English Pedagogy."

9. Gill's "Systems of Education."

10. Balfour's "Educational Systems of Great Britain and Ireland."

11. Graves' "History of Education," vol. III.

12. Duggan's "History of Education."

13. Graves' "Great Educators of Three Centuries."

14. Monroe's "Cyclopedia of Education."

15. Spencer's "Education."

QUESTIONS

1. Account for the philanthropic movement to which Rousseau, Pestalozzi, and many successors contributed, and state the results.

2. What was the cause of the rise of educational systems that foster patriotism and efficiency? Name several notable examples.

3. To what educational efficiencies have European nations had to resort in their recent competition with one another?

4. How may we obtain a definite general view of the German system of education? Why?

5. What was the purpose of the Hohenzollerns in adopting the sixteenth-century Reformation, and to what educational reforms as means to the end did they resort? What part did successive Hohenzollerns play in the accomplishment of their ambitious policy?

6. At what psychological moment did Frederick William II introduce the cherished system of centralization in school administration, and into what details did his reforms extend?

7. Why has the kindergarten had no place in the German school system?

8. Account for the intensely practical and nationalistic tendency in the higher education of Germany since 1866 and 1871. What always was the attitude of William II?

9. Who attends the Volksschulen? What purpose did the Hohenzollerns try to work out through these schools? How have the clergy and the schoolmasters helped to force this prescriptive yoke upon the masses?

10. How have the ends of Hohenzollern militarism been served by the entrance conditions, curriculum, and the teachers in three systems of secondary schools? How have these ends been conserved in the education of German women?

11. Account for the large number of German universities and their prestige.

12. Explain the serious violations of educational idealism of which the pan-German national system of education has been guilty.

13. In whose hands was education very largely in France before the establishment of the first republic?

14. Explain the origin of "infant schools" in France and their absorption into the national system.

15. Explain the educational plan of the founders of the First Republic, and its fate.

16. Explain the admirable system of education which Napo-

leon inaugurated, and how he healed the breach which the national convention had made between the church and state. How did the universities fare at his hands?

17. Explain the conciliating and retrogressive attitude of the restored Bourbons toward education.

18. Who was Guizot, and how did he reconcile the church with state control of schools? What did he do for teachers? What did he say?

19. What did Louis Napoleon do for education, and why did he restore denominational primary schools?

20. Account for the educational policy of Gambetta and his associates. Explain in detail the very complete system of school supervision to which the schools of the Third Republic are subject.

21. Of what school problems has the Third Republic disposed since 1881?

22. How may the education of the French child now begin? Describe the two grades of elementary schools open to all French children.

23. What two kinds of secondary schools flourish in France? How are they supported? By whom attended? Compare the entrance conditions and elective possibilities of these high schools with the despotism of the German system, and justify your preference.

24. How has France provided for the secondary education of women? Compare the opportunities of the French girl with those of the German, English, and American girls.

25. Explain the extensive reorganization of French higher education since 1896. To what extent are the universities subject to the state? Consult reference works on the superior technical and professional institutions for which France is now so celebrated.

26. Why did the educational interests of the English industrial classes suffer so long, and how did philanthropy come to the rescue?

27. Account for the origin and success of two English "charity school" associations.

28. Who was Robert Raikes? Explain the success of his Sunday-schools, and the result to the cause of education.

29. What was the Madras system? Through whom was it

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brought to England, and with what success? Account for the visit of George III to the school of Joseph Lancaster.

30. Explain the origin and success of Robert Owen's "infant schools," and the modifications introduced into this movement by Samuel Wilderspin and the Reverend Charles Mayo.

31. What other events besides the philanthropic movements finally induced the English Government to provide educational facilities for the industrial classes?

32. What governmental action retarded the growth of sentiment in favor of absolute state control of schools, and how were matters settled by the Victorian government?

33. Account for the English voluntary schools and board schools in origin, curriculum, and maintenance. Account for the rapid growth in number of the board schools. Why are the "non-conformists" displeased with the Parliamentary Act of 1902, and what are the prospects?

34. How may the education of the English child now begin? Explain the attendance requirements and curriculum of the English board and voluntary schools.

35. What are the "higher grade board" schools of England, and how do they compare in popularity with the continuation schools?

36. How does England provide herself with teachers? What has she done for women?

37. What provisions for secondary education existed in England before 1902?

38. Explain the function, curriculum, and general character of the famous English "preparatory" schools. What do these schools owe to Doctor Arnold? Compare the grammar-schools and private schools with the endowed secondary schools.

39. Explain the origin, curriculum, and prestige of Oxford and Cambridge. What did Cecil Rhodes do for Oxford?

40. Explain the origin of London University, and the great changes it has recently undergone.

41. What are the "municipal colleges" and "university colleges" of recent England?

42. Compare the adjustment of conflicting claims in English education with that of Germany and France.

CHAPTER XVIII

THE UNITED STATES

The educational activities of the American colonies were closely patterned after the mother-country system. The colonial transplantation of education was followed by a nationalizing movement which, for a time, was seriously checked by the very revolution that produced the new nation, but from which check, or depression, there was a "great revival" before the Civil War, and from which our present system, full of faults but full of glorious prospects, ultimately developed.

AMERICAN COLONIES

The thirteen colonies came into existence when Europe was still in the grip of the fierce agitations of the Reformation, and many of the colonists, most of them Protestant, came to America as refugees, hoping to establish in the New World institutions—religious, political, and educational—that should conform with convictions born of persecutions in the mother country. At the opening of the seventeenth century, and far into the eighteenth, the educational institutions in most of the European states were controlled and supported by the church and religious orders, assisted financially by private benevolences. Coming to the New World for conscience sake, as most of them did, the colonists brought with them the conviction that religion was fundamental in education, and that therefore education should be shaped and controlled by the church. Nevertheless, this conception had begun to combine with a new conception in the countries of the Reformation, in several of which "guilds" had created a sense of municipal responsibility, and because the great reformers themselves, especially Luther and Calvin, contended that, in order to make education universal, the state should at least establish, if not control, the system. This enriched conception of education became the ideal of the mass of the people, especially in Holland and Scotland, where the Reformation was primarily a religious and theological movement; but in France and England, where the Reformation was largely an ecclesiastical and political movement, the new ideal was adopted only by the Huguenots and Puritans. The two conceptions appeared promptly in the colonies. In the South, where the colonies were organized more usually under the dominating influence of the Anglican communion, education became particularistic, and the rights of the masses were long ignored. In the North, on the contrary, and wherever the ideals of Luther and Calvin were largely present, education was gradually, if not promptly, organized on democratic lines. Thus arose three types of schools: the selective in the South, the parochial in the middle colonies, and the governmental in New England.

Southern Colonies.—In Virginia, and to a very considerable extent in other Southern colonies, England reproduced herself. The colony began (1607) as a venture by gentlemen whose main purpose it was to enrich themselves through the development of vast

plantations, and then, if opportunity presented itself, return to higher social positions in the mother country. These great landowners became centres of widely scattered social wholes, miniature domains in which the class distinctions commonly supported by the Church of England were largely reproduced not only in matters political, but especially also in education. The planter intrusted the education of his children and special protégés to the clergy and tutors, and presently, when possible or desirable, sent them to Europe to complete such education. Here and there secondary schools were established by private interests, but neither the church nor the government took any direct part in the establishment of schools.) Trade apprenticeships were usually the only provisions made for the education of the dependent and industrial classes. Where elementary schools were established for the common people they were called "poor schools," and maintained by charitable and voluntary subscriptions. For half a century after the foundation of Jamestown, schools were almost unknown, and successive generations grew up in comparative ignorance. This aristocratic conservatism is voiced in Sir William Berkeley's famous outburst in 1671, when he wrote: "I thank God that there are no free schools and printing, and I hope we shall not have them for a hundred years; for learning has brought disobedience and heresy and sects into the world, and printing has divulged them and libels against the best government. God keep us from both."

The same general conditions prevailed in the other Southern colonies. It was only in colonies established by dissenters, such as the Scotch Presbyterians in North Carolina, that any attempts were made to establish public schools.

William and Mary College.-The provincial government, aided by the London Company, the king himself, and the Anglican bishops, made early but unsuccessful efforts to establish secondary schools and a college. The main purpose was to provide the church with ministers and to promote piety. In 1692, after constant renewal of efforts, William and Mary College, named for the home sovereigns, was established at Williamsburg, Va. When the sum of twenty-five hundred pounds had been raised by subscription, the lieutenant-governor heading the list, the Reverend James Blair, commissary of the bishop in Virginia, was sent to London to secure a charter. This was granted, and the king endowed the new institution with rich gifts of land and moneys, to which the planters and the Colonial Assembly also contributed. The college was thus opened under most promising conditions. It was founded, as stated in the charter, "to the end that the church of Virginia may be furnished with a seminary of ministers of the gospel, and that the youth may be piously educated in good letters and manners, and that the Christian faith may be propagated among the Western Indians to the glory of Almighty God." The course of study was suited to the end in view. It embraced divinity, language, and natural science-a "divinity," says Howison, "shaped and moulded at every point by the liturgy and creed of the English Church; languages which filled the college walls with boys hating Greek and Latin grammars; and natural philosophy, which was just beginning to believe that the earth revolved around the sun, rather than the sun round the earth." This, the second college founded in America, rendered admirable service, for it furnished not only ministers of the gospel but also many of the scholars, jurists, generals, and other leaders of the great struggle for independence, and, although almost ruined by the Revolution, it recovered and, with a course completely adjusted to the changing environment of our country, it has survived and continued to contribute with honor to the cause of higher education.

The Middle Colonies.—The middle colonies were settled by religious refugees from Holland, France, Scotland, Germany, etc. They brought with them the strong denominational convictions to which they had fallen heir through the Reformation in the mother country. They all held to the fundamental principle of the Reformation, namely, that the Bible should be the rule of faith and life, that it should therefore be read by every one, and that there should be elementary schools; but, jealously guarding the denominational convictions in which they differed, they established schools attached to the "parish" church, which were, therefore, known as parish, or parochial, schools.

New York.—The Dutch brought with them to New Amsterdam (New York) and the villages of the colony the excellent school system of Reformed Holland, in which control was distributed between the church and the state. In addition to the ordinary elementary branches, these schools taught the catechism and prayers of the Reformed Church. In short, the New Netherlanders holding to the idea of universal education committed themselves almost completely to the policy of elementary schools, thus acting in sharp contrast with the Anglican policy of the Southern colonies. After 1652 there were some attempts at Latin, or "grammar," schools in New Amsterdam.

When, however, in 1674 the English took final possession of the New Netherlands, the parish schools failed to secure the support of the new masters, and thus weakened they were gradually displaced by the random policy of the Southern colonies.

Pennsylvania.—The first settlers of Pennsylvania came from various parts of western, northern, and central Europe. The new colony of Penn, understanding the hard conditions of Europe, and appreciating the value of such immigration into Pennsylvania, welcomed and invited these refugees. They, in turn, coming for conscience sake, brought with them, as before noted, the profound denominational conviction to which they had been converted in the homelands, and to safeguard these interests for themselves and their posterity, they all established their own schools side by side with their own churches, thus committing the colony inevitably to the policy of parish, or denominational, church schools from the very beginning.

That this policy was not originally in Penn's mind appears from the plan of proprietary government which he drew up himself in 1682, in which he mentions "public" schools. In 1683, the year in which Philadelphia was founded, the council of the province actually ordered the establishment of such a school and invited Enoch Flower from England to teach it. In the charter which he granted in 1711 he defines his purposes at length and with prophetic foresight. Said he: "Whereas the prosperity and welfare of any people depend, in a great measure, upon the good education of youth, and their early introduction into the principles of true religion and virtue, and qualifying them to serve their country and themselves by breeding them in reading, writing, and learning of languages and useful arts and sciences, suitable to their sex, age, and degree-which cannot be effected in any manner so well as by erecting 'public schools' for the purposes aforesaid," provisions are hereby guaranteed and ordered. The Friends soon (1689) started the "Penn Charter School," which, although an endowed secon-dary school itself, open free only to the poor, presently established elementary schools throughout the city as branches. They also established elementary schools, with some secondary schools, in close connection with their meeting-houses throughout the colony, thus perhaps unconsciously committing themselves to the congregational policy which the new immigrations were bringing into the colony. The large influx of Lutherans, with an original policy very like that of Penn, also promptly erected their own schools side by side with their churches wherever they settled. One of their number, the learned Francis Daniel Pastorius, who laid out Germantown in 1683, established the first private secondary school in 1701, and taught for many years. The Mennonites included in their parish system the famous schools of Christopher Dock. This "pious schoolmaster of the Skippack" came in 1714, taught school many years with true Pestalozzian inspiration, and in 1750 completed "the first elaborate educational treatise in America." What was done for education by the Friends, the Lutherans, and the Mennonites was duplicated everywhere by the Reformed, the Presbyterians, the Baptists, the Moravians, the Catholics, etc. Such attempts at "grammar-schools,"

or secondary education, as that of Pastorius, were undertaken especially by the Moravians, as at Bethlehem, Nazareth, and Lititz. The Presbyterian log college at Neshaminy became the cradle of Princeton and other colleges. The Reverend Michael Schlatter was the great educational champion of the Reformed Church.

When the tide of immigration began to extend into western and northern Pennsylvania, voluntary subscription schools, established and maintained by neighborhoods, were substituted for the parish or congregational schools. The schools established in Wyoming valley, settled by Connecticut colonists, were really public schools.

A conspicuous attempt to produce school teachers who should fuse the various immigrant nationalities of Pennsylvania into a common citizenship was made by Benjamin Franklin in 1743, when he established an "academy" at Philadelphia, whose curriculum is startling in fulness of content and practical wisdom of selection.

The colonists of New Jersey and Delaware were interested in education from the beginning, and so far as action was taken to establish schools before the Revolution, these colonists were committed in part to the parish system, while random private attempts were more usual.

New England Colonies.—The people who founded the colony of Massachusetts had left comfort, home, and wealth and come to the New World to establish a commonwealth in which they might worship God unhindered by king or priest, and according to the dictates of their own conscience, guided only by an open Bible. Socially most of them belonged to the middle class and were generally well educated. They were not disturbed by any aristocratic social views, as was the case in the Southern colonies, nor by conflicting denominational interests, as was the case in the middle colonies. Among their great leaders were Oxford and Cambridge graduates, who brought with them the precious seeds of learning. Within a few years of the landing of the *Mayflower*, when their difficulties and perils were still very real, these sturdy Pilgrims, perceiving the relation of means to end, planned a system of education that should guarantee to their posterity the advantages of the Christian commonwealth which they had come to found.

Harvard College .- To provide themselves with faithful pastors and leaders was the first concern of the colony. Accordingly, in 1636 "the general court (legislature) voted an appropriation of four hundred pounds to found a school, which, after its first private benefactor, the Reverend John Harvard, received the name of Harvard College." The other New England colonies, moved by the same interests, cheerfully and liberally sustained this educational institution of Massachusetts. The college was opened in 1638 and the first class was graduated in 1642. The entrance requirements were in harmony with the purpose of the college and the humanism of the century, and were stated in 1642 as follows: "When any scholar is able to understand Tully, or such like classical author ex tempore, and make and speak true Latin in verse and prose . . . and decline perfectly the paradigms of nouns and verbs in the Greek tongue, let him then, and not before, be capable of admission into the college." Private instruction and private schools founded in some towns made it possible to meet these requirements.

Town Schools.-In 1647, after some tentative legislation, the general court of Massachusetts passed a remarkable educational bill, in the carrying out of which Massachusetts became the first founder of common schools in America. That the framers of this document had not lost the religious impulse of the Reformation appears in the strong words of the preamble, where it is stated that the purpose of the schools to be founded is to thwart "one chief object of that old deluder, Satan, to keep men from a knowledge of the Scriptures." The law provided that every township containing fifty families should maintain an elementary school, and that the teacher should be paid partly from taxes levied and partly from tuition fees. As soon as the township contained one hundred families, it was to establish and maintain a Latin, or grammar, school, whose course of study fitted the boy to enter Harvard College.) Owing to the concentration of the population necessary on account of Indian perils, and for convenience, the schools established by the law really became town schools. In the conception of this law, the State was the instrument of the church, but the law remained the ideal even after the school had become completely secularized. (All the other colonies of New England, except Rhode Island, adopted the Massachusetts idea. On account of fanatical devotion to freedom of thought, Rhode Island adopted the random schools of the Southern colonies.

Decline of Town Schools.—The cause of the town schools in New England suffered at least three set2

backs within the first century, from which they failed to recover before the Revolution. The first two setbacks came from the mother country and the third from within the colonies themselves.

When in 1649 England became a commonwealth, and Puritanism gained the ascendancy at home, university men ceased to migrate to the colonies, thus depriving the second generation of the inspiring leadership with which colonial education had been ushered into its first life.

The restoration of the Stuarts (1660-1688) swung England like a pendulum from the extreme of Puritanism to the opposite extreme of moral tolerance and theological liberalism, a change which we see reflected in the Toleration Act of 1690, and in consequence of which the forbidding scarlet-letter asceticism of the colonies, as reflected in the Salem witchcraft wave (1692), gave way to diverging religious beliefs and toleration of other sects, thus depriving the schools of the intense religious impulse which had inspired them at first.

The town schools of New England also lost much of their initial efficiency through the growth of the town population and through the spread of colonial population into unsettled regions. Originally the settlers clustered round the "meeting-house" and the school both for devotional reasons and for protection against Indians; but when the incentives to this centralization gradually disappeared, and the town spread farther and farther away from the school, and new settlements sprang up, it became necessary for the town to provide either a "moving" school or a "district" school in order to satisfy the democratic demand for equal school opportunities. The moving-school teacher, employed by the responsible town, was generally well qualified for the work, but, to keep down expenses and to reach a number of places in the year, he was moved every few months. When self-governing districts arose, either in the spreading town or in new settlements, such districts maintained schools of their own; but the available teacher was often a poor teacher, and simply "kept" school.

This gradual decline of efficiency in elementary education was accompanied by a similar decline, though not so pronounced, in grammar-school efficiency up to the Revolution. Nevertheless, Yale, Dartmouth, and Brown Colleges had in the meanwhile been added to Harvard in the effort to supply the higher education needed in the learned professions.

TRANSITION

When in 1776 the accredited representatives of the thirteen united colonies signed the Declaration of Independence, thus proclaiming the birth of a new republic, the colonies were still very young. The Revolutionary War into which they were now plunged taxed their resources to the limits of endurance. The cause of education was among the first to suffer. Many of the schools had to be closed because there were no available funds, others because the able-bodied teachers with the able-bodied boys were needed in the war. Moreover, and above all these things, the stress and strain of war made it difficult to keep in mind the direct relation of education to government and the precious things of life which government should guarantee.

Nevertheless, there were among the founders of the

republic statesmen who, like the founders of the first French republic in 1792, realized that the efficiency and fate of governments both depend most directly upon education as a means to the end. Washington, Adams, Jefferson, and others believed that in a government "of the people, for the people, and by the people" education must be the function of the government itself, and that if the American republic was to live education must be universal and free. Washington as early as 1790 said to Congress: "There is nothing that can better deserve your patronage than the promotion of science and literature. Knowledge is in every country the surest basis of happiness. In one in which the measures of government receive their impression so immediately from the sense of the community, as in ours, it is proportionally essential." In his inaugural address John Adams said: "The wisdom and generosity of the legislature in making liberal appropriations in money for the benefit of the schools, academies, and colleges is an equal honor to them and their constituents; a proof of their veneration of letters and science, and a portent of great and lasting good to North and South America, and to the world." Thomas Jefferson said: "A system of general instruction, which shall reach every description of our citizens, from the richest to the poorest, as it was the earliest, so it shall be the latest of all the public concerns in which I shall permit myself to take an interest. Give it to us in any shape, and receive for the inestimable boon the thanks of the young, and the blessings of the old, who are past all other services but prayers for the prosperity of their country, and blessings to those who promote it."

Although there were influences at work before the close of the eighteenth century that promised an early fulfilment of these hopes and prayers, there were obstacles present, apparently insurmountable obstacles, that deferred the solution of the problem for almost half a century. Among these obstacles were the practice of public grants to private schools, sectarianism, class prejudice, provincialism, and selfishness.

Virginia.-The responsible classes, as we have seen, took no real interest in elementary education for the common people. The first attempts at anything resembling such education came to be known as planta-tion "field schools." These schools, organized by any group of neighbors of their own accord, were not responsible to any higher social whole, and depended for control and financial support on the organizing group. After the Revolution, however, there appeared a growing sentiment in favor of public education. The first great champion of the cause was Thomas Jefferson, who, as early as 1779, submitted to the State legislature an educational bill providing not only for district schools, supported by local taxation, but also for two-year and six-year secondary courses, to be followed by a three years' college course at William and Mary for those entitled to it, and to be supported from the public treasury.

Jefferson's bill fell through, but it was a seed sown in good ground. In 1796 a law permitting counties to establish tax-supported schools was passed, and although it was not put into effect, it paved the way for the establishment of a "literary" (school) fund in 1810. In 1816, when this fund had grown to a million dollars, those in charge of it recommended "a system of public education, including a university, to be called the University of Virginia, and such additional colleges, academics, and schools as should diffuse the benefits of education through the commonwealth." Although the legislature was not prepared to adopt this revised educational system of Jefferson, it voted (1818) an appropriation of forty-five thousand dollars from the income of the literary fund to be used by the counties to send poor children to a proper school.

This appropriation really delayed, as it did in other States, the establishment of common schools at public expense. The reasons are evident; it conveyed the impression that public education was a "charity," thus offending at the same time both the poor, who did not like to be looked upon as paupers, and the well-to-do, who failed to see how it benefited them at all. Moreover, there were a hundred thousand children in question, for whose accommodation it would be quite impossible to build schools and employ teachers with so small a sum of money. Under these conditions, and because it was almost impossible to secure graduates of academies or colleges to teach such schools, it became necessary to place most of the children in such schools as already existed. To make matters worse, the commissioners to whom the difficult task was committed, were often incompetent political appointees. Nevertheless, during the twenty years that the law remained in force, the cause of public education was making steady progress. The appropriations became steadily larger, the school terms longer, and the number of pupils willing to take advantage of the funds kept growing. Thus, although the majority of the school children still attended denominational, private, and field schools, sentiment in favor of state funds for the support of common schools was rapidly taking shape in the public mind, and, by the time Virginia was half a century old as a State, she was almost ready to accept the system completely.

Other Southern States.-In the formation of state constitutions North Carolina appears to have been the first of the Southern colonies to include a provision looking toward the establishment of common schools. The constitution was drawn up in 1776, and in 1817 Judge Archibald Murphy, by request of the legislature, submitted an elaborate and highly creditable plan for public schools. According to this plan the children of the poor were not only to be educated but also maintained. This "maintenance" provision defeated the bill, but in 1825 it resulted in the legislative establishment of a literary or school fund, the income of which was to be used for the support of public schools. Early in her statehood Georgia, by providing for land endowments for schools, looked toward the ultimate establishment of a state system to be known as the "University of Georgia." The creation of a perma-nent school fund followed, and the sentiment in favor of public education continued to grow. South Carolina began as early as 1811 to make yearly appropriations of money for the establishment of "free schools" throughout the State, the number in each legislative district to equal those of its representatives. Unfortunately, legislative representation was based on property qualifications, and so the schools came to be looked upon as "pauper schools." Although this confusion injured the growth of sentiment in favor of public education, it could not prevent the steady increase of appropriations and the final triumph of the cause. In 1816 Maryland followed the lead of Virginia by subsidizing the education of the poor, and in 1825 by passing a law permitting counties to establish common schools.

The transition from ecclesiastic and exclusive to state-supported and universal education was very much the same in all the Southern commonwealths. In all of them there was some sort of co-operation between statesmen and friends of education, so that before half a century of statehood had elapsed, they had begun to create literary funds, subsidize schooling for the poor, pass permissive laws for establishing public schools. More than all this, Baltimore, Charleston, Louisville, Nashville, Memphis, Mobile, New Orleans, and other large cities had actually established systems of public schools. In most of the older colonies the classical grammar-schools of the aristocracy had largely given way to the more democratic, progressive, and non-sectarian academies, and, while the various denominations continued to rely on their own higher institutions of learning, these also became more and more progressive in function and curriculum. A number of the Southern States extended their support of public education to higher institutions.

Middle States.—In the Middle States the conflict between private interests and sectarianism, on the one side, and the champions in favor of public education, on the other, was often extremely bitter.

New York.—The excellent parochial system of the Dutch Reformed lost its efficiency when on their arrival in 1674 the English refused to continue the policy of public stipends. It became customary for the better classes, as before stated, to depend upon the clergy or tutors for the education of their children, or, if they could afford it, to send them to Europe. During the century, however, that thus intervened between the coming of the English and the Revolution, a number of secondary schools, partly supported by gratuities from the State, were organized, and in 1754 King's College, now Columbia, was founded. As for elementary schools, the few that existed were either remnants of the parish system, or private ventures, or the creation of philanthropic societies.

The Revolution taught the various elements of the population the valuable lesson of a common cause, so that "sentiment in favor of public education began to prevail over vested interests and sectarian jealousies." One governor after another called upon the legislature to establish common schools. The first legislative attempt to organize a system of public education was made in 1787, but it did not include elementary schools. In 1789 land was set apart in each township for common schools, and in 1795 grants were arranged for towns. In 1805 incomes from land were set apart as a school fund, which was to be used when the yearly income was sufficient.

In 1812 it was arranged to put the common schools under the control of a state superintendent, after which rapid improvement in the raising of taxes and the administration of schools followed. Unfortunately, the academies remained under the control of a Board of Regents, and the State, instead of establishing normal schools, looked to the academies (private secondary institutions) for the professional training of teachers. In short, although the State of New York started the first state system of public education, it was only after great delay that she became able to co-ordinate all elements into a completely free and consistent system, while in the meantime her great cities had troubles of their own.

New York City .- State funds were granted not only to academies but also to societies organized to promote elementary education. The city of New York furnishes the most celebrated case. Here, at the beginning of the nineteenth century, there were thousands of children for whom the church and the private schools could not provide adequate facilities. In 1805 a body of philanthropists, headed by DeWitt Clinton, organized the "Free School Society of New York City," to provide adequate additional elementary school facilities for the children in question. The State promptly came to the assistance of the society, adding public grants to city grants. In 1826 a new charter was obtained from the State, changing the name to "Public School Society of New York" and granting permission to charge a fee for children whose parents could afford it. Parents who felt that they "were too poor to pay and too proud to confess their poverty" now no longer sent their children to school, thus causing such a fall in the attendance that the fee was abolished after a few years of trial. Then the society prospered and was rapidly gaining control of elementary education. In 1842, however, after the city council had refused several church schools a share in the public funds, the Catholics, "on the ground that the non-sectarian instruction given in the schools of the society was really Protestant," took the fight to the State legislature. The trouble was settled the same year by the legislative

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establishment of a board of education for New York City, to be elected by the people. The board was to control the use of the school funds, and no portion of such funds was to go to any school not under the management of the board. Buffalo, Utica, Oswego, and several other cities had similar experiences.

Pennsylvania. -- In Pennsylvania state-supported "poor schools" gave place to state-maintained common schools only after prolonged and bitter agitation. The framers of the new constitution (1790) wrestled with the problem of public education; but, in spite of the support of the cause by influential men like Franklin and Benjamin Rush, the legislature permitted only Timothy Pickering's celebrated "gratis" clause to stand. This compromise clause provided for the establishment of schools throughout the State "in such a manner that the poor may be taught gratis." Even at that it was not until 1802, 1804, and 1809 that the legislature passed acts to make this permissive law effective, and then, disappointing as it was to the friends of popular education, it was arranged that, instead of establishing new institutions, the State should subsi-dize private, church, and neighborhood schools, thus incurring less expense. To this end the income of sixty thousand acres of land appropriated for "aiding public schools" was now applied.

The friends of public education would not let the matter rest. Governors and other prominent men took it upon themselves in season and out of season to plead the cause of free common schools. That the new idea would prevail in the end became evident enough in 1818, when Philadelphia, under special act of the legislature, became "the first school district of Pennsylvania, with power to establish Joseph Lancaster's monitorial system at public expense." The system was put into operation by the famous Englishman himself, and the experiment attracted much attention. Several years later the special legislation was extended to five more districts, and in 1824 the State passed a law permitting any community to establish free schools. This law was repealed, however, before it could go into effect.

In the meantime "The Pennsylvania Society for the Promotion of Common Schools" had been formed. This society demonstrated in a series of memorials addressed to the legislature that the "pauper school law" then in force was a bad piece of business, and succeeded in 1828 in securing the establishment of a state fund for state schools. Finally, in 1834, under Governor Wolf, they succeeded, after a vigorous educational campaign, in securing the passage of the free-school bill drawn up by Senator Breck. This "act to establish a general system of education by common schools" was to be put into operation through the general superintendency of the secretary of state, and seventyfive thousand dollars was to be appropriated annually from the state fund for the purpose. The city wards, boroughs, and districts which were erected as school districts were to share in these appropriations provided they levied local taxes for schools. The enactment of this law pleased the northern counties, settled chiefly by New Englanders, and the western counties, where the Scotch-Irish Presbyterians constituted a large proportion of the population, but it met with bitter opposition in eastern ("old") Pennsylvania, where the Quakers and Germans looked upon the new

movement as the death-blow to their own parish schools. The new law was also opposed by the people who could not see why they should help to pay for the education of "other people's children." The opponents of the law hoped to win votes enough in the next legislature to repeal the law. This campaign of prejudice and selfishness might have succeeded had not Thaddeus Stevens, afterward known as the "Great Commoner," stepped into the breach with matchless eloquence in the nick of time, April 11, 1835. The weak features of the law were corrected, a larger annual appropriation guaranteed, and the system put into operation by Thomas Burrowes, secretary of state under Governor Ritner. Although in the meantime the cause of public education had gained many friends, only half of the school districts promptly availed themselves of their rights, and it was not until years later that this permissive law was finally accepted by all the school districts.

The cause of common schools suffered from similar hindrances in the sister States of New Jersey and Delaware, where school funds were created for the education of the poor, but through the agencies of existing church and private schools. Here, too, permissive laws were passed, but accepted only after much opposition and serious delay.

New England States.—The district schools, or "divided" schools, to which, as before noticed, the New England "town schools" so largely gave place before the Revolution, presently furnished the motive for the transition to state systems of public schools.

Massachusetts.—The divided town system had come into existence as a convenience under local necessity, but in 1789 the custom became law. Further legal sanctions permitted the districts to levy taxes and hold property. In 1827 they were granted the right to choose a committeeman, whose function it was to be to appoint the teacher and control the school property. In course of time the choice of the committeeman, the site, and the teacher became a matter of petty jealousies, which frequently resulted in low tax rates, short terms, and wretched work.

As the expense of maintaining divided schools increased, the old-time grammar-school, for which a hundred householders were to provide, became impossible except in the larger towns, and fell out of use before the close of the eighteenth century. Under these conditions "academies" (private secondary schools), progressive in spirit, were founded for those who could afford such opportunities, and in 1797 the custom was legalized. At the time when the state system of schools came into existence, almost half a century later, no less than fifty academies had become the financial protégés of Massachusetts alone.

In the meantime the glaring inefficiency of the district system became more and more evident to thoughtful men, and vigorous campaigns for the betterment of the situation were carried on in the press and from the platform.

Probably the man to whom Massachusetts owes the inauguration of the state system was John G. Carter, a member of the State legislature. It was through his influence that a number of laws were passed which paved the way for the final act. "In 1826 every town was required to choose a school committee to supervise the schools of the town, select text-books, and cer-

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tify teachers, though the district committeeman could still appoint the teacher. In 1834 a state school fund was established, in which a town could share on condition that it raise by tax a dollar for each child of school age. Carter's efforts culminated in 1837 in the passage of a bill for the establishment of a state board of education to consist of eight members. It was to have no executive powers, but was to collect information upon school affairs and recommend changes to the legislature. Horace Mann was elected its first secretary, and with his name is associated the reform of the district school."

Other New England States.—The course of events leading up to a state system of common schools was very much the same in all the New England States, except Rhode Island. In Rhode Island the "voluntary organization of education continued throughout the eighteenth century." A law was passed in 1800 permitting each town to maintain "one or more free schools," but only Providence availed itself of the permission. It was not until 1828 that a state system supported by local taxes was finally inaugurated.

Westward.—Immigration from the older commonwealths followed parallels of latitude. The northern parts of Ohio, Indiana, and Illinois were thus occupied mostly by people from New England and New York, and the southern parts by immigrants from Virginia, Kentucky, Tennessee, Louisiana, and other States in which public education had not yet become fully organized. Michigan, however, was settled almost wholly by immigrants from New England, New York, and northern Ohio.

These migration facts determined the course of

events in the development of education. Michigan, whose settlers had come from States in which public education was already in vogue, was the only one of the four in question to escape from prolonged conflict of ideals. The federal "Ordinance of 1787," organizing the "Northwest Territory," to which all these States belonged, had provided a firm foundation for public education, but the difficulties of conquering the virgin wilderness and building new homes, the problems of transportation, and the presence of petty political and sectarian jealousies, seriously delayed the development of state systems. In due time, however, the provisions . of this ordinance became the general policy not only of the "Northwest" but also in the States carved out of the "Louisiana Purchase." This ordinance divided the territory into townships six miles square, and section sixteen of the thirty-six sections into which each township was divided was set apart for the support of public schools. Later two or three townships were set apart for the support of a state university. Problems of state and local supervision, together with that of local taxation, were not settled in most of the States in question much before the close of the first third of the nineteenth century.

THE GREAT AWAKENING, 1837-1876

It was a great step forward in the march of events when the various States of the American Union had committed themselves to the policy of public education, as most of those in existence before 1837 had done. Much, however, that was desirable still remained not only not done but not even in mind. The most serious

thing in the situation was the lack of appreciation, the stupid apathy, the unpardonable indifference of the general public. It is not hard to account for this arrest of progress. Vested interests whose incomes would be cut off continued to press their claims upon the public; the common people for whom philanthropic societies had provided charity schools were afraid of local taxation; the church people long wedded to the parish school were afraid of the secular schools; there were plenty of people so unpatriotic in their selfish possessions that they still resented the democratic responsibility of paying taxes for the education of the children of other people. It would take time to overcome these traditions, and still more time to come to the realization that, in order to secure actual efficiency, "permissive laws" must give way to mandatory laws in the organization, supervision, and control of schools. Men of vision were needed-vigorous agitation was imperative-wise solutions of problems were essential. The course of events proves that all of these were ready. Although others had paved the way in every section of our country, men like Horace Mann and Henry Barnard deserve foremost credit for the great awakening.

HORACE MANN

It is generally conceded that John G. Carter, through whose legal genius the legislature of Massachusetts organized a "board of education" in 1837, made the educational career of Horace Mann possible, and that Henry Barnard, through his *Journal of Education*, interpreted the movement scientifically and gave it national impulse, but that Mann himself, through his spiritual vigor, roused the general public of America from its lethargy into its first genuine appreciation of state-supported, state-controlled common schools.

In the Making .- Horace Mann (1796-1859) was born of humble parentage at Franklin, Mass., and brought up in poverty and toil. He never ceased to regret that he had missed a happy childhood. Eager as he was to get an education, he was obliged to acquire the elements in a wretched district school, which he could attend only a few weeks every winter. Presently he began to devour the histories and religious books which Benjamin Franklin had donated to the town library, after which, fortunately, he acquired a start in Latin and Greek from an itinerant schoolteacher, and, at the age of twenty, entered the sophomore class of Brown University, from which he was graduated at the head of his class. Later he studied law, and was admitted to the bar at twenty-seven. He rose rapidly and in 1823 was elected to the State legislature, where his ability attracted much attention. Accordingly, in 1837, when the legislature through Carter's inspiration had created the "Board of Education," and was therefore regarded as the logical candidate, Horace Mann was appointed secretary of the board. This position practically made him superintendent of schools. It was to be his function, as officially defined, "to collect information of the actual condition of the common schools and other means of popular education, and diffuse as widely as possible throughout every part of the commonwealth information of the most approved methods of arranging the studies and conducting the education of the young, to the end that all children in this commonwealth who depend upon the common schools for instruction may have the best education which these schools can be made to impart." He accepted the appointment not because it would bring him financial remuneration or personal glory but because he believed it to be a great opportunity to serve the cause of humanity, and because, as he afterward himself said, he looked upon the common schools "as the way that God had chosen for the reformation of the world."

Condition of the District Schools .- In 1837 the district schools of Massachusetts were only colorless remnants of the vigorous town schools to which the colony had originally pledged itself. The self-control to which the districts had attained was often vitiated by class spirit. People who could afford it patronized private schools, thus relegating the district schools to the unenviable state of "pauper schools." The schoolhouses were unsightly, the teachers poorly equipped, and the term short. This wretched condition of things stirred Mann's soul. He wished "to restore the good old custom," as his wife, a most faithful biographer, tells us, "of having the rich and the poor educated together; and for that end he desired to make the public schools as good as schools could be made, so that the rich and the poor might not necessarily be coincident with the educated and the ignorant."

Methods of Reform.—Mann recognized the difficulty of his task. He saw that he must conciliate men of influence, break down prejudice, and rouse the great body of the commonwealth out of its apathy. To this end he gathered up all his resources and devoted all his energies. Among his most effective methods were the lecture tours which he made through the State, for which his intellectual brilliancy and his eloquence specially fitted him; the Annual Reports, of which he issued twelve, and in which he discussed all the phases of education with most illuminating efficiency, and which were widely read not only in Massachusetts but also in other States; and a Common School Journal, in which he reported actual conditions and the endeavors which the Board of Education was putting forward to facilitate reforms.

Normal Schools .-- Mann was profoundly convinced that among the most important agencies in his proposed school reforms were competent teachers. Accordingly, in 1830, encouraged by the private gift of ten thousand dollars, to which the legislature added a like amount, he established the first normal school in America at historic Lexington. This was followed by several similar institutions, all conducted with much efficiency, in different parts of the State. The one founded at Bridgewater was dedicated in 1846. In his address Mann said what every friend of normal schools may well ponder: // I believe normal schools to be a new instrumentality in the advancement of the race. I believe that, without them, free schools themselves would be shorn of their strength and their healing power, and would at length become charity schools, and thus die out in fact and in form. Neither the art of printing, nor the trial by jury, nor a free press, nor free suffrage can long exist to any beneficial and salutary purpose without schools for the training of teachers; for if the character and the qualifications of teachers be allowed to degenerate, the free schools will become pauper schools, and the pauper schools will produce pauper souls, and the free press will become a false and licentious press, and ignorant voters will become venal voters, and through the medium and guise of republican forms an oligarchy of profligate and flagitious men will govern the land; nay, the universal diffusion and ultimate triumph of all-glorious Christianity itself must await the time when knowledge shall be diffused among men through the instrumentality of good schools."

Controversies.—The ardor with which Mann contended for common schools, from which all sectional and sectarian spirit should be abolished, exposed him to the charge on the part of ecclesiastical bodies that to his influence as a schoolman was due to a large extent the low esteem in which faith and religion were held at the time. These animosities were carried into the legislature, where early in his work determined efforts were made to block his career by abolishing the Board of Education. In these efforts his enemies failed ignominiously.

The most famous controversy in which Mann became involved through his uncompromising attitude toward all forms of educational inefficiency was the prolonged one with the "masters" of the Boston "grammar-schools." It came about in the following manner. On a trip to Europe in 1843 he had devoted some six weeks to the inspection of schools, often spending whole days in one school. He was so pleased with the Pestalozzian spirit and methods of the schools that, on his return, he reviewed his experiences at length in his seventh *Annual Report*. Among other things he had noticed especially that the teachers invariably taught without a book in their hand, except in reading or spelling; that they always stood rather than sat when teaching a class; and that the pupils were neither punished nor in fear of punishment. Mann had not made any direct accusations, but the Boston masters, whom the shoe fitted exactly, took up the cudgel against him in a most vituperative pamphlet. The controversy which thus began prolonged itself for several years, when, as was to be expected, the Boston schools were subjected to thorough inspection, all incompetent masters dismissed, and a more humane discipline inaugurated, thus not only vindicating but also strengthening the indomitable secretary.

Estimate.—In his eleventh Annual Report Secretary Mann was able to call attention to a number of gratifying results. The rural schools had been greatly improved; the towns and cities had introduced the graded system; the school terms had been lengthened; the attendance had been greatly improved; increased state appropriations had been granted; three normal schools had been established, and the teachers had become more efficient.

He might have said much more, for he had practically recreated the schools of his State, giving them a spirit of democracy that was far more liberal than anything to which America had as yet aspired, and the cause of education in general a spiritual impulse that was presently to be felt throughout our land.

At length, however, the strain of his position, intensified by the controversies in which, as a true reformer, he was compelled to involve himself, began to tell upon the secretary, and he resigned from office in 1849. He filled the unexpired term of John Quincy Adams in Congress, and was nominated for governor in 1852, but accepted the presidency of Antioch College, Ohio, and, after giving a splendid account of himself, died there in 1859. The closing words of his last baccalaureate sermon at Antioch embodied the spirit which animated his whole career. "I beseech you," said he, "to treasure up in your hearts these my parting words: Be ashamed to die until you have won some victory for humanity."

HENRY BARNARD

'The literary and philosophic exponent of the "great awakening" was Henry Barnard (1811-1900).

In the Making.—Henry Barnard came of a cultured Connecticut family. He was born at Hartford, and, after an excellent preparatory training, entered Yale College, where his brilliancy attracted much attention. After his graduation in 1830, he began the study of law, but, on the advice of President Day of Yale, took charge of an academy at Wellsboro, Pa., for a year. In 1835 he went to Europe to make a special study of social and educational conditions. He was much impressed by the work of Fellenberg at Hofwyl, and even more by the labors of some of Pestalozzi's other disciples both in Switzerland and Germany.

Official Services.—Among many other gifts, Barnard had the genius of organization. On his return from Europe in 1837, he was elected to the Connecticut legislature. This body, accepting the measure which he formulated, created a board of education, and induced him to take the office of secretary. The reforms which he instituted during the four years of his incumbency closely resembled those of Horace Mann. In the same year in which Mann established the first American normal school, Barnard founded the first teachers' institute. Soon afterward, like Mann, he founded a *School Journal*. Through his inspiration the legislature undertook a general and salutary revision and codification of school laws. The "school societies," or local district independencies which he disturbed through his revision, resented the invasion of their cherished rights, and he lost his office.

In 1843 the government of Rhode Island persuaded Barnard to become the first commissioner of common schools for that State. He now duplicated the work which he had undertaken for Connecticut, but with much less opposition, and when, six years later, on account of failing health, he had to relinquish this office, "the State no longer regarded wilfulness and personal opinion as praiseworthy independence, and he could honestly claim that Rhode Island had one of the best school systems in the United States."

In 1851 Connecticut recalled Barnard, making him superintendent of schools and principal of the state normal district at New Britain, which had been established through the efforts of his admirers. The great body of trained teachers which he now sent forth quickened education in every part. He consolidated and simplified the organization and administration of public education more completely, virtually giving the system its present consistency.

U. S. Commissioner of Education.—For many years Barnard had agitated the importance of "a federal agency for the collection and publication of trustworthy information and statistics" in education. It was due largely to his efforts that the national government, in 1867, established the Bureau of Education at Washington. He became its first commissioner, and organized the policy which his distinguished successors have so effectively carried out.

Literary Services .- What America, in her "great awakening," needed even more than organizing genius was a systematic exposition of the principles and methods to which such educational reformers as Comenius, Rousseau, Pestalozzi, and Froebel had committed the educational practices of Europe. Henry Barnard proved to be the man of the hour. As early as his second official connection with Connecticut, he had conceived the idea of an American Journal of Education. He first broached the subject in 1854 at a meeting in Washington of the "American Association for the Advancement of Education." The idea was applauded, but financial support seemed impossible. Presently Barnard undertook the task himself, devoting his own fortune and a great part of his life to the success of the journal. / It grew into thirty-one octavo volumes, which constitute a monumental cyclopædia of education. It is almost impossible to think of any important phase of education-its nature, history, and agencies-that has not received expert attention in his journal. Among the many special treatises which, apart from the journal, Barnard produced in his busy career are his works on "Pestalozzi and Pestalozzianism," "Kindergarten and Child Culture," "German Schools and German Teachers," "American Pedagogy," "English Pedagogy," "National Education in Europe," "Normal Schools."

Estimate.—It would be difficult to find Barnard's peer as a source of information in the study of educational reforms and reformers, and the systems arising from these both in Europe and America./ More than that, "practically every reform introduced into American education down to 1880 owes much of its success to Barnard's support."

RESULTS OF THE GREAT AWAKENING

Inasmuch as the apathy from which the general public had been awakened was originally different in its causes, the awakening itself was correspondingly alike or different as the case might be.

New England States.—In the New England States, where the town system had become a system of petty school societies, or local district independencies, it was necessary for the champions of centralization to foster school funds, and, by means of wise distribution, gradually to overcome all forms of opposition to local taxes. In the solution of this matter the successors of Mann and Barnard in Massachusetts, Connecticut, and Rhode Island were singularly fortunate, though in a few instances the process was not complete before about 1880.

Increased state aid to public high schools gradually made successful competition impossible for the academies and forced private secondary education from the field, and almost all the large cities provided for superintendents of schools.

Under the impulse of central supervision and State appropriations the various localities improved their school buildings, equipments, salaries to teachers, length of terms, and the status of the teachers.

While sparseness of population and poverty of resources delayed progress in Maine, New Hampshire, and Vermont, the course of events led to the same general results. In the Middle States.—The "great awakening" was not confined to the New England States.

New York.—In the State of New York centralization in the organization and control of education was delayed by limiting the jurisdiction of the "Board of Regents," created in 1784, to public education above the elementary schools, thus permitting unfortunate independencies. The most serious delay due to this limitation was the power which the "Public School Society" acquired over elementary education in the city of New York, where the system of elementary public schools created in 1842 was compelled to compete with the schools of the society until 1853, when it finally turned over its funds to the city board and went out of existence.

In the meantime the appointment of a state superintendent, in 1812, was a great step forward toward central control, and, although for a time, from 1821 until 1854, this office was combined with that of secretary of state, much was accomplished for the cause of the public schools.

The academies continued to receive state aid, thus delaying the complete organization of secondary education, but from 1844, when a state normal school was established, the academies gradually lost their power. Opposition to local taxation finally also gave way, and in 1867 the State abolished tuition fees, thus making elementary education entirely free.

Pennsylvania.—In spite of all that progressive governors and statesmen could do, selfish and sectarian prejudice prevented the salutary permissive law of 1834 from going into general effect, and it was not until 1854 that the recalcitrant school districts—about two hundred of them—were finally compelled by law to establish public schools according to the new provisions.

In the meantime, however, this long-delayed result was sure to follow, for the cause had able champions in a number of progressive governors and other statesmen. The State was particularly fortunate in the selection of the first state superintendent, the inimitable Thomas H. Burrowes. He was a born organizer, gifted with rare wisdom, indomitable courage, and fine tact. It was, however, not until 1854 that the state educational department became absolutely independent under the care of a superintendent. This "Department of Public Instruction" centralizes and coordinates all public education in the State, and the same results are accomplished for separate counties, cities, and districts by a cohort of efficient superintendents, principals, and inspectors.

In 1857 provision was made for a complete system of normal schools. They were to be established at first by private enterprise, but soon obtained state aid, and in 1877, when ten of them were in operation, this aid had become very considerable. There are now thirteen, and most of them have been taken over by the State completely.

The "New Code" of 1911 provides for the most complete and extensive organization of public education, and includes a "State Board" intrusted with large powers.

Secondary schools, connecting with the university and with life, have become absolutely free to both sexes, thus gradually driving the private academies from the field. New Jersey.—The "great awakening" came rather late to New Jersey. There was a state fund for "pauper schools," but not for public schools until 1838. It was not until 1848 that control was centralized in a state superintendent. Since then great progress has been made, so that to-day the State is justly proud of her splendid system.

Delaware.—The little State on the Delaware has been very conservative, and failed to live up to her early "permissive laws." It was not until after the Civil War that superintendencies were established, and then the question remained unsolved until 1912. Since then Delaware has made much progress in line with her sister States.

The Northwest .- In Ohio, Indiana, and Illinois, where, as we have seen, the founders had come with their diverse and conflicting colonial conceptions, the compromising process usually took the form of very active campaigns. Each State was fortunate in the leaders who championed the cause of state-supported, state-controlled education—Samuel Galloway in Ohio, Caleb Mills in Indiana, and Ninian W. Edwards in Illinois. In their methods of campaign these men remind us strongly of Horace Mann, and, as in his case, they won in spite of sectarian and vested interests. At first only permissive laws could pass, and private schools continued to share in public funds. Nevertheless, these defects were all remedied before the Civil War broke upon the country. Michigan, settled chiefly by New Englanders, escaped these delays, and made very rapid progress from the very year when the constitution was adopted, namely, 1837, providing at once for permanent school funds, local taxation, and a state

university. All these States have organized complete systems of central control, state normal schools, and state universities.

In the rest of the Western States the course of events was much the same. Each State, upon admission to the Union, "received the sixteenth section of school land and two townships for a university, and, in the States admitted since 1848, the endowment of schools has been increased to two sections," while Texas, an independent republic from 1836 to 1845, "stipulated before becoming a State that it should retain sole possession of its public lands, and has set aside for education nearly two and a half millions of acres." In other words, each State at once provided by constitution for the organization of a state school system, including university privileges, and arranged for their financial support. Such obstacles as sectarianism, vested private interests, and the confusion of public education with pauper education-things which had given the earlier commonwealths so much trouble-seldom seriously delayed or injured progress.

The Southern States.—The educational awakening which swept over the North and West found the South too depressed to respond at once, for the coming conflict disturbed the spiritual atmosphere long before it really came, and when it did come it paralyzed the resources of the fair Southland too completely to make recovery possible at once.

In some States, however, there was noticeable progress almost up to the Civil War. Several States had provided for common schools by permissive laws, and the attendance had been rapidly growing. Prominent men were beginning to take special interest in public education, and several conventions called for the purpose of considering the establishment of state systems had convened. As the war approached, all else became of secondary importance, and when it was over the South and her resources lay crushed to the earth.

The poverty of the South made it difficult to provide schools for two million children, and this difficulty was increased by the moral and social necessity of establishing separate schools for the whites and blacks. The fear that a "reconstruction congress," with millennial ideals of universal brotherhood, might try to force "mixed schools" upon the white population gradually disappeared. One great help to the South was the founding in 1867 of the Peabody Educational Fund of two million dollars, to be used to stimulate local efforts in education. When the agencies for the distribution of these funds found them inadequate, they appealed to Congress, and through these appeals more than ten million dollars have been granted to the support of schools.

Since 1890 the "New South" has made great progress in education. Progressive governors are taking a hand in education. The politics which for some years crept into the appointment of state superintendents has yielded to democratic ideals. The teachers are receiving professional training of a high order, and the outlook is most promising.

EXPANSION

After the Civil War the policy of public education found practically no opposition, and all sections of the Union strove to extend the inestimable advantages of state-supported and state-controlled systems to the general public. In this vast expansion the federal government has appropriated millions of acres of land directly to the States for the support of elementary schools and for the special support of higher institutions offering courses in agriculture and technical education, including state universities. The States themselves have appropriated vast sums of money to various geographical districts to stimulate local effort. The American people as a whole have become convinced that the political, social, and economic destiny of our great country must be closely bound up with free, universal, and compulsory education.

NATIONAL SYSTEM

As might have been expected, the spirit of democracy which animated the founders of the American republic continued to animate the founders of the separate States, so that these resemble each other not only in their general structure but especially also in the educational systems for which their constitutions made provision. Hence it has come to pass that in the general process of expansion, not only before the Civil War but also afterward, the state systems of education, North, South, and West, have continued to range themselves more and more completely into a corporate, consistent whole, which, with pardonable pride, we may well call our national system.

This result has been greatly promoted by the creation of our federal Bureau of Education in 1867 thanks to the genius for educational statesmanship of Henry Barnard—for although the expert collation, digestion, and distribution of educational information for which this bureau is designed is not in any sense mandatory, it has the effect of inspiring and co-ordinating educational efforts and educational experiments.

The state control of schools is vested in a state superintendent, who, though not officially subject to the U. S. Commissioner of Education, is nevertheless tacitly subject to the national co-ordinating policy. This policy is further supported by county superintendents, city superintendents, and district superintendents—all subordinate to each other in descending series, but vested locally with adequate supervising power.

It is to be ascribed largely to this animating spirit of co-ordination that all state-supported schools have now come to occupy the relation of rungs in a ladder.

Elementary Schools.—While many localities, especially the larger cities, have incorporated the kindergarten into the state system, most States require the child to attend from the age of six or seven for seven or eight years. In most States the elementary curriculum includes nature, agriculture, handicrafts, civics, morals, singing, and physiology, in connection with language, drawing, arithmetic, and history. The

States now furnish free text-books and other school supplies, the school term ranges from seven to ten months a year, minimum salary laws and often insurance laws protect the teacher, normal schools supported and controlled by the States equip the teacher professionally, while institutes partly supported by the States serve as a stimulus to continued improvement through reading circles, libraries, etc. A number of States now provide continuation schools for those who, for economic or other reasons, are obliged to leave school at the age limit.

Secondary Education.-Each State supports free, though not compulsory, secondary schools, open to both sexes, sometimes not coeducational, and offering courses covering from two to four years. The curriculum generally includes Latin, one or more living languages, together with several of the natural sciences, usually physics, chemistry, and botany; the college entrance requirements in English literature, including from four to six classics, supported by rhetoric; manual training supported by drawing; agriculture, bookkeeping, history, civics, physiology, morals, singing, and mathematics. Electives looking toward normal school and college entrance are often permissible. The States generally look to the normal schools and colleges for the adequate supply of expert and departmental teachers. School buildings complying with the requirements of modern sanitary and artistic school architecture are commonly supplied with physical and chemical laboratories, general and supplementary libraries, often with auditoriums, gymnasiums, and other facilities. Spacious playgrounds are often found, with county "field days" as powerful stimuli. Lecture courses and community-centre movements are becoming more and more frequent concomitants of these state-supported secondary schools.

Higher Education.—Every State supports a state college, to which, under prescribed conditions, both sexes are admitted free. Here technical courses covering a wide range of vocations, such as agriculture, engineering, commerce, and the like, are offered, in connection with minor courses in literature, history, civics, etc., and the elective system prevails to a large degree. As a rule, only highly trained experts are placed in charge of departments, and the institutions are fully equipped with laboratories, libraries, lecture-rooms, farms, etc. Graduation leading to degrees is generally safeguarded by stringent examinations conducted by accredited officials.

In addition to these accredited state universities there are numerous medical colleges and law schools under the partial control and support of the State, and the same is true of many institutions for defectives. The denominational colleges and theological seminaries of the United States are not under the immediate control of the States, and receive no financial support, although there are valuable concessions. In the older commonwealths there are great endowed universities, some of them offering courses that would require a lifetime to cover, and which may well be considered the peers of the great universities of Europe.

Estimate.—The spirit of democracy which animates the whole American system lifts it immeasurably above the autocracy of the German system, and that without injury to the ideal of co-ordination and efficiency, if not actually to the advantage of both. In this country secularization has not humiliated the church as it has in France, while, on the other hand, the church has not delayed the coming of state-supported public schools so long as in England. We look with justifiable pride upon a system that does not fail in reverence to God while it accords the fullest measure of freedom to the individual without injury to the claims of the social whole.

REFERENCES

1. West's "History of the American People."

2. Monroe's "Cyclopedia of Education."

3. Boone's "Education in the United States."

4. Graves' "History of Education in Modern Times."

5. Barnard's "American Journal of Education."

6. Butler's "Education in the United States."

7. Draper's "American Education."

8. Mrs. Mary T. Mann's "Horace Mann."

9. Winship's "Horace Mann."

10. Dexter's "History of Education in the United States."

11. Mann's "Annual Reports."

12. Annual Reports of the United States Commissioner of Education.

QUESTIONS

r. State reasons for the stages in the history of education in the United States.

2. With what three types of schools did the colonial history of education begin, and why?

3. Upon what educational facilities did the Southern planter rely? Account for any additional facilities. Explain the attitude of Sir William Berkeley.

4. Describe pretty fully how William and Mary College came into existence. Account for the course of study, and explain the admirable service of this institution.

5. What was the origin of parish schools in the middle colonies? Examine the control, maintenance, and curriculum of these parish schools in colonial New York. What became of them after 1674?

6. Prove that public rather than parish schools were the ideal

of William Penn. What, nevertheless, became the policy of the settlers of Pennsylvania, and how was it put into operation by the various denominations? Make a special study of Christopher Dock's schools.

7. What kind of schools was substituted for parish schools in western and northern Pennsylvania?

8. Explain the case of New Jersey and Delaware.

9. Account for the early establishment of "town" schools in Massachusetts and New England.

10. Explain how Harvard College came into existence. Justify the entrance requirements.

11. Examine three reasons for the decline of the town schools in New England after 1649, 1660, and 1690. Account especially for the "moving" schools and the later "district" schools.

12. Why was the cause of education among the first to suffer during the Revolutionary War?

13. What were the hopes and prayers of the founders of our republic in matters of education, and what obstacles balked these hopes?

14. Explain the details of the education bill which Jefferson fathered, and its fate. Why did the creation of literary (school) funds for the education of the poor delay the establishment of common schools?

15. Account for the passage of permissive laws. Were they not really contributions to the cause of education?

16. Distinguish the exclusive grammar-schools from the more progressive academies which sprang up in the South.

17. How did secondary.schools come into existence in New York? How did the Revolution contribute to the establishment of common schools in New York State?

18. What was unfortunate in the otherwise excellent bill of 1812?

19. Account for the origin of the "Free School Society of New York City." Describe the phenomenal prosperity of the movement, and explain the final surrender of this society to the city Board of Education.

20. Account for the "gratis" clause in the new constitution of Pennsylvania (1790), and show how the fulfilment of this law retarded the coming of "free schools."

21. Explain the important permissive laws of 1818 and 1824.

22. What was the free school bill of 1834 in Pennsylvania? In which sections of the State was it opposed? Explain in full the great part which Thaddeus Stevens played in connection with this bill. See Wickersham's account of him.

23. Explain how the district schools of New England gradually acquired legal sanction, and set forth the details.

24. Account for the gradual substitution of private secondary schools for the original New England grammar-schools.

25. Explain the highly creditable service which John G. Carter rendered the cause of education in Massachusetts.

26. Compare Rhode Island with other New England States.

27. Outline the course of events to which the establishment of schools in Ohio, Indiana, Illinois, and Michigan gave rise. What were the educational provisions of the celebrated "Ordinance of 1787," and why were they so important?

28. What were the main features of the great educational awakening after 1837? What parts did Carter, Mann, and Barnard play in this "great awakening"?

29. How did Horace Mann manage to secure an education, and why did he rather than Carter become the secretary of the Board of Education in 1837?

30. In what condition were the schools of Massachusetts in 1837, and by what methods did Mann seek to reform them?

31. Explain why Mann believed in normal schools, and how he succeeded in his efforts to establish several.

32. How did Mann become involved in two bitter controversies, and what were the results?

33. Explain the services which Mann rendered the cause of education through his Annual Reports.

34. Sum up the achievements of Horace Mann, and follow him to the close of his life.

35. What can you find in the making of Henry Barnard that would prophesy a great career?

36. Compare the career of Barnard as secretary of the Connecticut Board of Education with that of Horace Mann.

37. Explain his great success in Rhode Island, and his recall to Connecticut, together with his splendid services.

38. How did Barnard become the first United States commissioner of education, and what impulse did he give this bureau? 39. What services did Barnard render the cause of education as a writer?

40. What problems were finally solved in the New England States by the creation and distribution of state school funds?

41. How was centralization in the organization and control of schools delayed in New York, and how was it gradually completed?

42. How did the academies of the State of New York lose their hold, and elementary education become absolutely free?

43. What hindered the Pennsylvania school law of 1834 from going into immediate effect, and how was the matter finally settled?

44. What services did Thomas H. Burrowes render the cause of education? How is public education in Pennsylvania now supervised? Consult references on the history of Pennsylvania normal schools, and examine the Code of 1911.

45. How have New Jersey and Delaware solved some of the hard problems of education?

46. What were the problems that Ohio, Indiana, and Illinois had to solve, and how were these problems solved? Why did Michigan escape many of these troubles?

47. How did the Western States upon admission to the Union solve the problems of state schools, their maintenance, and regulations?

48. How did the Southern States respond to the great awakening before the Civil War and afterward?

49. What were the difficulties of the "reconstruction" period? What was the Peabody Fund? Describe the educational aspects of the "New South."

50. How have all sections of the Union responded to the problems of state-supported and state-controlled school systems?

51. Why is it correct to say that the school systems of the United States constitute a national system?

52. How may the education of the American child begin? Who attends the elementary schools? What uniformity in the curriculum is wide-spread? What are some of the fortunate conditions under which our children complete the elementary course? Consult references regarding our continuation schools.

53. Name some of the many safeguards thrown about the profession of teaching in the United States.

54. Explain the state relations, curriculum, teaching forces, and physical equipment of our secondary schools.

55. Explain the state relations, curriculum, teaching forces, and physical equipment of our state universities and other higher educational institutions. Consult references.

56. Compare our national system with that of Germany, France, and England.

CHAPTER XIX

TENDENCIES

Educational reforms, like other solutions of problems in the course of history, have generally given rise to new problems. Just as in the history of the United States the one "continued problem" has been conflict between the claims of the States as individuals and the claims of the federated whole, so in the history of education the one continued problem has been, and probably will continue to be, such an adjustment of the individual and the social whole to each other as shall be progressively best for both, in harmony with the unfolding purposes of God. We have thus far studied a succession of reform movements, and found that in most of them adjustment of claims was incomplete, and that where the adjustment was ideal it either hardened into lifeless forms which called for new reforms, or else succumbed to the conflict with the opposite. And yet we think that in the long run and on the whole the sum total of these reforms has been a constant gain, and that in the reform movements of the present age we are nearing goals set for us in the divine ideal. It is only fitting and proper that the closing chapter of this volume should be devoted to a brief survey and estimate of the tendencies and movements that promise a more glorious future.

The Scientific Tendency.—We are no longer satisfied with mere traditions. The intellectual world is convinced that nature will give up her secrets to any one who is willing to pay the price of intelligent and patient research. The laboratory method has become the familiar and powerful instrument of research, not only in the study of physical nature but also in the study of man himself—his origin, being, and destiny. As a result the older sciences have become greatly enriched in content, and new sciences have come into being, and both have become integral parts of the school curriculum.

Startling scientific discoveries have become practical applications, just as Locke had foreseen. Many thoughtful men, among them the scientists themselves, and of course those who believe that education should amount to preparation for living in an ever-changing and progressive environment, hold that the sciences, pure and applied, deserve a high place in all the schools from the bottom to the top. Thus, for practical as well as pedagogical reasons, elementary science in the form of "nature-study" has found its way into the elementary schools; physics, chemistry, biology, and astronomy in the secondary schools and colleges, and research departments with powerful laboratory equipments have become the mark of prestige in the great universities. Among those who have spoken with authority on these matters we must honor such men as Huxley, Agassiz, and Spencer. The last-named thinker deserves special treatment in this connection.

HERBERT SPENCER

In Herbert Spencer (1820–1903) the scientific gains of past centuries became eloquent, and demanded recognition.

In the Making.—Herbert Spencer was born at Derby, England. He was educated by his father, a schoolmaster at Derby, and by his uncle, the Reverend Thomas Spencer, rector of Hinton. The education which his father, a non-conforming Wesleyan, gave him during his childhood and early youth "tended de-cidedly to quicken his interest in the study of nature, and to develop his powers of independent thought and of inquiry into the nature of things." At the age of seventeen, instead of going to college, he began to study engineering, in which occupation he spent some years. In the meantime his active mind turned powerfully to the most progressive English liberalism. In that year when, as a consequence of revolution, France for a second time became a republic, and the thrones of Europe trembled, namely, 1848, Spencer was residing in London, where he had moved, so it would appear, in 1843, in order to devote himself to literature and philosophy. It was in connection with these pursuits that he became a contributor to the Westminster and Edinburgh Reviews, and presently a writer of philosophic books that in number and power of conception have lately commanded much attention.

Books.—In 1855 he finished the first edition of his "Principles of Psychology." He undertook to prove that life consists of "a continuous adjustment of inner relations to outer relations," and that the mental capabilities are the developed result of such adjustments. In 1860 he published the little book "Education," which entitles him to a place in the history of education, and which at the time of its appearance ran counter to almost everything in the established system of secondary and higher education. The book consists of four chapters. Ideas on Education.—The first chapter of this bracing little volume is an essay on the relative value of studies, and the others are devoted respectively to intellectual, moral, and physical education.

Relative Value of Studies.—Spencer was opposed to the traditional course of study, especially to the great preponderance of the classics in secondary and higher institutions of learning. He contended that the only rational way of determining "what knowledge is of most worth" in a curriculum is to discover of what real use it is in life. Then he made a complete survey of life—complete as he thought—and summed up all the various activities under the general heads of selfpreservation, the bringing up of children, social relations, citizenship, morals, and leisure. Suiting the means to the ends, he concluded that the school curriculum should be built up of such studies as physiology, mathematics, physics, chemistry, biology, and social science.

"Thus," as Spencer puts it in his confident way, "to the question with which we set out, What knowledge is of most worth? the uniform reply is—science. This is the verdict in all the counts. For direct selfpreservation or the maintenance of life and health, the all-important knowledge is—science. For that indirect self-preservation which we call gaining a livelihood, the knowledge of greatest value is—science. For the due discharge of parental functions, the proper guidance is to be found only in—science. For that interpretation of national life, past and present, without which the citizen cannot rightly regulate his conduct, the indispensable key is—science. Alike for the most perfect production and highest enjoyment of art in all its forms, the needful preparation is still—science. And for purposes of discipline—intellectual, moral, religious—the most efficient study is, once more—science."

The soul-shrivelling worship of the merely useful betrays itself especially in Spencer's brutal condemnation of the soul-life of the race-its finer sympathies and sensibilities—its inner visions and its holy aspirations. "However fully we may admit," he says, "that extensive acquaintance with modern languages is a valuable accomplishment, which through reading, conversation, and travel aids in giving a certain finish, it by no means follows that this result is rightly purchased at the cost of that vitally important knowledge sacrificed to it. Supposing it true that classical education conduces to elegance and correctness of style, it cannot be said that elegance and correctness of style are comparable in importance to familiarity with the principles that should guide the rearing of children. Grant that the taste may be greatly improved by reading all the poetry in extinct languages, yet it is not to be inferred that such improvement of taste is equivalent in value to an acquaintance with the laws of health. Accomplishments, the fine arts, belles-lettres, and all those things which, as we say, constitute the efflorescence of civilization should be wholly subordinate to that knowledge and discipline in which civilization rests. As they occupy the leisure part of life, so they should occupy the leisure part of education."

As a reply to these conclusions of Spencer it will probably be sufficient to call the reader's attention to the fact that in a well-balanced curriculum the things which Spencer compares should not, and really cannot, exclude each other, and that what Spencer chooses to call the leisure part of life is often the part that makes life really worth living. To this reflection we ought to add the fact, widely recognized among those who stop long enough to think about it, that an education consisting almost wholly of scientific pursuits, as in Spencer's own case, and as Darwin sadly recognized in himself, cannot satisfy the deepest hungers and thirsts of the soul.

Intellectual Education.—In his second chapter Spencer, as we might expect from his interest in psychology, contends for scientific pedagogy. In the course of the chapter he devotes himself with keen insight to principles, most of which indeed have become familiar to us through Comenius, Pestalozzi, and other illustrious educational reformers.

He takes up the following principles in order: (r) In teaching we should proceed from the simple to the complex, (2) from the concrete to the abstract. (3) The genesis of knowledge must follow the same course as the genesis of knowledge in the race. (4) Adequate particulars should pave the way for generalization, or theory should follow practice. (5) Increase of mental power comes only through what the pupil can be induced to do for himself, or self-activity is the basis of education. (6) Pleasurable excitement on the part of the student must be the criterion of any educational method. We do violence to nature when we try to substitute force for the pupil's own initiative.

The third and the last of these principles call for comment.

In the contention that the genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race, Spencer, like Ziller and Rein, presses Herbart's principle of correlation to extremes. All these disciples of Herbart assume that the biological theory of recapitulation holds in mental as well as in physical development. This conclusion breaks down at many points under the hammer of overwhelming proof. It is the glory of twentiethcentury educational practice to save the individual from the despotic recapitulation which this theory considers inevitable, and the success with which the means to this end have been employed, namely, the substitution of superior environment in the redemption of the individual, has proved far greater than that of Ziller and Rein in their effort to build up a recapitulating curriculum.

Spencer devotes the major part of his second chapter to proofs confirming Herbart's celebrated doctrine of pleasurable excitement through apperceptive instruction and the conclusion that the self-activity to which such pleasurable excitement provokes the mind is the surest way to increase of mental power. Inasmuch as apperceptive instruction makes that selection of materials through which the individual may be saved from despotic recapitulation of race-development possible, Spencer apparently breaks the force of his argument in favor of the recapitulation theory by those in favor of apperceptive correlation.

Moral Education.—Relying as wholly on his inductive method of reaching conclusions in the moral world as he does in the world of pure intellect, Spencer, as we might expect from his less emotional temperament, rejects the extreme individualism of Rousseau's theory of morals. Nevertheless, ignoring the claims of Christian ethics, and relying solely on his evolutionistic psychology, he adopted Rousseau's theory of natural consequences in moral discipline, and defends it with a captivating array of illustrative proofs that seem irre-sistible until the reader matches his own experience and his own observations against Spencer's illustrations, and then discovers that nature is often too severe and still more often too slow in the consequences with which she punishes infractions of her laws. While, for example, it is quite true, as Spencer points out, that the child who "neglects to get ready in time for a walk," and is therefore left at home, learns the necessary moral lesson effectively without the use of artificial force, and is compelled to admit the justice of the penalty, thus remaining on terms of good-will toward those who inflict the corrective, it is equally and startlingly true that if an innocent child plays with fire it may be injured for life, or even burned to death, in which case the punishment, if it could be prevented, must be considered simply brutal, and without justification. In other cases, as in the formation of bad habits, such as those of appropriating property that does not belong to the child, or smoking cigarettes, or impure thoughts, the first consequences do not serve as a sufficient warning against fearful final effects.

Notwithstanding the serious weakness of this chapter, we owe Spencer our thanks for opposing the harsh methods of discipline so common in his days, and in other days, and for his contention that the only mode of discipline which produces self-governing men and women is reasonable discipline, which in most cases really is a natural discipline. "Bear constantly in mind," says Spencer, "the truth that the aim of your discipline should be to produce a self-governing being, not to produce a being to be governed by others. Were your children fated to pass their lives as slaves, you could not too much accustom them to slavery during their childhood; but as they are by and by to be freemen, with no one to control their daily conduct, you cannot too much accustom them to self-control while they are still under your eye."

Physical Education .- In the last chapter of his book Spencer calls the attention of parents and teachers to the great importance of caring for the body. Although his arguments are still uncompromisingly utilitarian, he often rises to the real moral heights of his own life. Thus, for example, he believes with Huxley that a man ought to be "a good animal," evidently for utilitarian reasons, but in the same breath urges that "health is a duty." In the same vein he finds fault with the fathers of England for being more concerned about the welfare of their horses and cattle than about the welfare of their children. "Men's habitual words and acts," says Spencer, "imply the idea that they are at liberty to treat their bodies as they please. Disorders entailed by disobedience to nature's dictates they regard simply as grievances, not as the effects of a conduct more or less flagitious. Though the evil consequences on their dependents and on future generations are often as great as those caused by crime, yet they do not think themselves in any degree criminal. It is true that in the case of drunkenness, the viciousness of a purely bodily transgression is recognized, but none appears to infer that, if this bodily transgression is vicious, so, too, is every bodily transgression. The fact is that all breaches of the laws of health are physical sins."

Applying these conclusions to the condition of the English schools as he found them, Spencer says: "If, as all who investigate the matter must admit, physical degeneracy is a consequence of excessive study, how grave is the condemnation to be passed upon this cramming system! It is a terrible mistake, from whatever point of view regarded." And then he goes on to prove that even if the overcrowded courses of study which he had in mind were good pedagogy—which he denies—such courses, by destroying the physical vigor needed in life, defeat the very ends of education.

Estimate.—That Spencer's conclusions on the great questions of curriculum, intellectual development, and moral discipline are based upon a philosophy which, to say the least, it would be rash to accept absolutely, must be evident to most of us, and yet we are compelled to admit that his book belongs to that brief list of immortal books which have helped to make the teacher's world and the pupil's world a better one. It stands for conclusions based upon exact and minute inquiry into facts, and patient induction that must ever be the scientific mood in which we approach and under which we shall finally succeed in solving our great problems of life and mind.

The Vocational Movement.—Invention, as Bacon foresaw, has followed close upon the heels of science. Thus have come the factory system and other industrial revolutions, blotting out almost completely the old-time stimulating educational relation between vocational masters and their apprentices. The new relation, namely, that of employer and employee, is much more mobile, so that even if the industrial plant could be utilized as a means in the training of expert operatives, the employer could not be sure that he would reap any benefits. Granted that through the sharing of incomes the relation of employer to employee could become mutually profitable, the modern industrial plant—and this is surely serious—must generally confine the operatives to a single process, which rather arrests than promotes mental development. What is still more serious—and economy makes it imperative is the well-known fact that only a few of the many employments in a great industrial plant require much mental effort at all.

If, therefore, the vast army of boys and girls that annually finds its way into the industrial world is to be saved from the fate of arrested development-not to speak of starvation wages-and the social whole into which these young people merge socially is to be saved from mental, political, and spiritual degeneracy, the school must assume the function of vocational guidance and vocational training. This has become the irresistible and powerful conviction not only of educational reformers-modern Pestalozzis-but also of states and nations. The great struggle for livelihood in overcrowded centres of population, and the still greater struggle for commercial supremacy-often with ulterior motives of ulterior political ambition in the background, as in the case of modern Germanyhave made most states and nations accept as final the function of establishing schools in which boys and girls can become expert "bread-winners" and expert workers in all those industries where efficiency is important to the welfare of the social whole or the political masters. All the principal states of Europe have maintained such training as integral parts of their educational systems for the last half-century, and the United States has lately taken hold of the matter with much enthusiasm.

Europe.—In Germany vocational education is provided in continuation schools, supplementing elementary, secondary, and higher schools of the national system. In this way provisions have been made not only for the rank and file of workmen in the different trades but also for the development of foremen and superintendents. Germany now also trains girls for quite a variety of vocations. In north Germany the schools generally confine themselves to theory, leaving the practical side to the care of employers, while in the south German states the two sides are combined and adapted as much as possible to local industries.

In France elementary schools articulate into continuation schools to which the pupils may be admitted at the age of thirteen, and continue there for three years. The course for boys varies with local needs, but always includes woodwork. The course for girls includes dressmaking, millinery, artificial flowers, and other useful tasks.

England began to make grants for evening industrial schools and classes as early as 1851, and twenty years later raised these tentative provisions into regular continuation schools open both day and evening, and offering theory as well as practice. In addition to these continuation schools England has lately established higher elementary schools offering four-year courses in theory and practice, but adapted to local needs.

United States.-In the United States some of the larger cities, notably New York, Philadelphia, Cin-

cinnati, and Richmond, began to offer industrial training through philanthropy the latter half of the nineteenth century, but only in evening continuation schools. It was not until later that the public schools followed the example, and organized evening classes in mathematics, drawing, science, and technical subjects. After some years day instruction began, and since 1906 several hundred day trade-schools, some for younger boys and some for youths between sixteen and twentyone, have been organized in the larger cities, and mostly through public support. Endowed secondary schools and technical high schools in a number of cities also provide higher training to equip our industries with leaders. "Part-time" vocational training has recently been attempted in connection with high school and college courses. In the great reconstruction following the recent war, Europe will need a veritable army of young men trained for expert work and leadership in many vocations, and, deprived of the opportunity to train these industrials, she will call upon America for help, and America cannot afford to be unprepared. This special stimulus, added to the general industrial awakening of the country, should rouse much enthusiasm.

Commerce.—The great industrial awakening of the last half-century has forced commerce into such vast proportions and technical complexities that expert training has become imperative. Until quite recently, however, it was assumed that such training was not the function of the school. The schoolmen looked upon such schooling as sordid, and the business world waited to be convinced of its efficiency. The conviction that the school owes something to commerce and that it can really serve commerce is rapidly breaking down all prejudice and replacing it with hope and confidence.

Germany, hoping to establish a world-empire in commerce, began soon after the Franco-Prussian War to train commercial experts through private continuation schools, in which a course of three years in commercial studies and modern languages was offered. To these facilities the government later added both public secondary and university courses. Although England and France were both rather tardy in the matter, both private and public facilities of a high order have been organized.

In the United States the commercial movement became a school movement shortly before the Civil War. The bookkeeping classes with which the movement began through private enterprise soon gave rise to so-called "business colleges." These, alas! were too frequently pecuniary adventures and makeshifts rather than effective agencies in the training of candidates for such a complex of mental and moral processes as modern business. The normal schools, largely to save the boy and girl for themselves, and thus for an education of better proportions, have until quite recently offered similar courses. Now that state supervision, inspired by the great commercial awakening, has incorporated optional business courses into our public high schools, the normal schools offer less ambitious business courses. One of the first attempts in this country to solve the problem of higher commercial education was the establishment of the Wharton School of Finance and Commerce at the University of Pennsylvania. Since then many universities have established colleges of commerce, some of them offering superior scientific and technical courses in finance and banking, international law and comity, modern languages and other allied subjects.

Agriculture.—The pastoral stage of civilization was followed by the agricultural, and the latter must in the last analysis be looked upon as the fundamental industry. So prolific, however, is nature, that as long as it was possible to supplement the production of food in any country by imports the government made no efforts to reform traditional and wasteful methods of agriculture. When Europe reached the acute stage, agricultural bureaus for research purposes were established by the countries affected, and presently agriculture became a part of the school curriculum. France, for example, has introduced the subject into elementary education and the normal schools, while Germany, in addition to elementary instruction, provides a secondary course in the upper grades of the Realschulen.

It dawned early upon statesmen of vision that among the greatest of our natural resources in America are vast agricultural regions, and that it is best to keep pace in food supply with the growth of cities as industrial and commercial centres. Therefore the national government as early as 1862, when we were still in the midst of the Civil War, began to stimulate agricultural instruction by granting land to colleges. Presently other revenues were added, and recently Congress has begun to furnish appropriations for agricultural instruction and college extension work. The great exodus of the country folk to the city within the last generation, resulting from the vast extension of the industrial revolution, has produced an ominous congestion of population in the great cities, and for this reason and also because agricultural instruction has been discovered to have great educational value, the various States have begun in earnest to make agriculture an integral part of the regular school curriculum, thus turning thousands of boys and girls "back to the farm." The great need is trained teachers, able to produce the desired result. The recent world war has given an additional impulse to agriculture in the schools, which is likely to bear further fruit. Moreover, forestry is likely to share with agriculture in the benefits of this impulse.

Religion and Morality .--- If, as psychology goes to show, religion, that is, relation to a personal God, is the final guarantee of morality, we might conclude offhand that the cause of morals would suffer irreparably by the surrender of the church to the state in the control of education. Thus far, to say the least, the results are rather startling. This is true first of all in France, from whose state-controlled schools not only religious instruction but all reference to the supernatural has been barred. But when we turn to Germany, where, under rigid state control of education, moral instruction is designedly and closely correlated with religious instruction, apparently satisfactory to Protestants, Catholics, and Jews, because it is imparted by their accredited representatives, morality as well as religion has become a slave to the despotism of dynastic militarism. In England, on the other hand, where by age-old deference to the church moral instruction is designedly denominational in the "voluntary schools" and undenominational in the "board schools," much bitterness has resulted from competition between the two kinds of schools, and the situation is still a serious problem.

In the United States the secularization of the schools has left no place for denominational instruction in the curriculum, and yet in most States the Bible is not only read but revered as the "book of books" and as the final court of morals. If, on the one hand, denominational instruction is distinctly prohibited, any absence of reverence for God and sacred institutions, on the other hand, is generally considered fatal to the moral influence for which we look in the teacher.

The fact must be patent to any dispassionate observer that, in spite of serious setbacks, the cause of religious morality has lately been gaining until it promises to become, as we might have expected from its primal function in life, the dominant motive in modern education. This moral revival manifests itself very conspicuously in the long-range relations of interdependence resulting from modern industries, modern commerce, modern government, and the modern press, in all of which honesty in its various aspects is indispensable to the very continuance of relations. A growing sense of human kinship and responsibility is another conspicuous promise that instruction in responsible stewardship will be increasingly emphasized in education. The conviction that what America needs most is an educational system which is moral from the base to the summit is wide-spread and insistent. This appears from the profound attention which the subject receives not only in state conventions of educators but especially also from the fact that the matter has been carried up into the council of the "National Education Association." The two phases of the tendency may be advantageously viewed under the idea of honesty and stewardship.

Honesty.—The conviction that morality should be the crowning effect of any system of modern education arises especially, as before noticed, from the new longdistance relations between man and man. Production for distant markets, for example, tempts men at both ends of the line to various species of dishonesty.

The large proportions which representative government in this country has assumed tend to remove the individual representative from the immediate scrutiny of the people and thus to moral laxity of office.

The new social and moral conditions to which young men and women coming to big industrial and commercial centres in ever greater numbers have to become used are full of moral perils, especially because the stabilizing moral sanctions of home and boyhood church cannot usually be duplicated. It is in order that under such new and trying conditions young people may give a satisfactory account of themselves to the state as to the high tribunal of conscience that American schools must be expected to ally themselves with the church and the home in laying stress on moral education.

Stewardship.—That the sense of stewardship which Christ brought into the world is making itself felt, especially in America and American education, and that its radius is lengthening into a world-empire, is very evident.

Denominational Colleges.—Much as we pride ourselves upon state colleges, and justly so, we feel that we must look to our denominational colleges to supply the higher education of the Christian ministry—an indispensable agency in moral education. It is generally recognized that although these colleges have in some instances been multiplied beyond the possibility of highest efficiency, they perform a function which the state colleges and other higher institutions could not be expected to perform, namely, the keeping alive of those great Bible truths which serve as most powerful moral stimuli.

Other Colleges.—That the Bible is looked upon as the indispensable book in the higher moral education which the present age demands finds confirmation in the fact that many colleges have recently introduced it into the course as a regular study. Such instruction, properly imparted, is of great importance to young men in their adolescence.

Christian Associations.—Young Men's and Young Women's Christian Associations are playing an important part in building up the religious ideals of our young people, and the Women's Christian Temperance Union has done a good work in bringing about the formulation of state regulations on questions of temperance which profoundly influence not only higher education but also our common schools.

Sunday-Schools.—While the specific purpose of the present-day Sunday-school is religious, it is a powerful and highly esteemed moral agency. Whether England or America is really the historical cradle of the Sundayschool may remain in dispute, but England and America both look upon this integral part of church work as a most essential agency in the development of public morals. The growth in number of these educational facilities is phenomenal.

Our Unfortunates.—The sense of Christian stewardship in modern education is conspicuous in the provisions made for the education of defectives. The feeling prevails that not only the church but also the state owes all unfortunates an education that functions in self-help, self-respect, and such happiness as may be possible under the circumstances. The blessed task of providing facilities for an astonishingly large number of mental defectives and sense defectives and other unfortunates can be effectively performed only by cooperation between the church, the state, and men of wealth. The latter, by their munificence, especially in great crises, have frequently vindicated themselves from the charge of heartlessness. The great progress which the present age is making in the education of defectives and other unfortunates is due to a large extent to gifted individuals who have devoted their lives to the discovery of methods.

The greatest credit for the discovery of methods in the education of mental defectives probably belongs to Edward Seguin, who came from France to the United States in 1850 and developed his methods here. He appealed to the mind through the senses, using such means as pictures, photographs, wax, clay, compasses, and pencils. These "physiological" methods of Seguin have sometimes been supplemented by books as means, but without much success. France, England, and Germany provide for the training of mental defectives along these lines, but the United States, thanks to the fine start given to us by Seguin, provides most fully for such education. About twenty thousand, or one-tenth of the whole number of such defectives in this country are receiving special training. Special clinics and investigations looking toward the discovery of helpful methods are being conducted by Doctor Witmer of the University of Pennsylvania, and

by Doctor Goddard of the Training-School at Vineland, N. J. Considerable progress has been made lately in the organization of tests, like the Binet-Simon tests for feeble-mindedness.

Sense Defectives.—Thousands of boys and girls mentally sound, but handicapped in the struggle to make a living, or a conscious burden upon others, and correspondingly unhappy, have become the protégés of the larger stewardship so conspicuous in the educational idealism of the present age.

To Abbé de l'Epee of Paris belongs the credit of inventing the first of the two chief methods of educating the deaf, namely, the manual or silent method. His school was adopted by the French nation in 1791, and has served useful purposes in other lands. The lipmovement or oral method, although known earlier than the silent method, was not employed much before the middle of the nineteenth century, but is now the favored method of most countries. The two methods are sometimes combined. Practically every State in our country has one or more schools for the deaf, and in Gallaudet College, at Washington, provisions have been made for higher education.

The credit of inventing the method of teaching the blind by means of "raised letters" belongs to another Parisian, Abbé Haüy. Through some fault in the management, his schools, founded late in the eighteenth century, were failures, but early in the nineteenth century his method had been adopted by all the leading countries of Europe, and by the middle of the century similar institutions were founded in the United States.

The skill to which both the deaf and the blind may attain in handicrafts is simply marvellous. The most conspicuous examples of high mental attainments are the well-known cases of Laura Bridgman and Helen Keller.

In America the provisions made for the education of millions of negroes whom the Civil War emancipated but stranded morally and industrially must be ascribed not only to the desire to escape a burden, but also to the sense of larger brotherhood and stewardship. Here men of wealth, like John F. Slater, vied with the Freedman's Bureau and other organizations of church and state in their efforts to shoulder great moral responsibilities. The New South owes a great debt to these agencies. They helped to make such experiments as that of Booker T. Washington at Tuskegee possible. In this connection, too, we cannot afford to ignore the splendid services of Robert C. Ogden, after whom a movement in Southern education has been named.

The same spirit of philanthropic sense of responsibility has prompted institutional efforts to provide schools for the dispossessed Indians of the great West. One of the most successful Indian schools was the great institution at Carlisle, Pa.

Among other moral movements in modern education are the reform schools where boys and girls otherwise lost to themselves and the social whole are educated. Probably the most conspicuous experiment in the philanthropic reclamation of prospective criminals is the George Junior Republic of New York State, founded by Captain George for the education of city street boys, and widely copied in other States.

Educational Experiments.—The tendency to fossilize in educational practice is more than matched in the present age by the tendency to subject every apparent conquest to new and more searching tests. This is to our credit, for it is an admission that we have not yet attained perfection. We can review only the most conspicuous of these experiments.

The Parker Experiments .- Francis W. Parker (1831-1902) began his own education in a New Hampshire district school, and after a course of several years in the University of Berlin, he became the superintendent of the schools of Quincy, Mass. (1875-1880). The board gave him a free hand, and he fairly revolutionized both the content of the curriculum and the methods of instruction, harmonizing both with the Froebellian principles of motor-expression and social participation, and giving even speech and the language arts these aspects. Much of the work was outdoor and informal, and thus Pestalozzian. This "Quincy movement" assumed a longer and longer radius in his later reforms as principal of the Cook County and Chicago normal schools (1883–1899), whence he sent forth enthusiastic disciples. In a way his experiments made those of Dewey possible. Colonel Parker's influence also lives through his books.

The Dewey Experiments.—Doctor John Dewey made an educational experiment at Chicago University between 1896 and 1903 that must be looked upon as one of the notable contributions to the theory of education. Dewey noted that human relations are largely determined by the industries in which people engage, and, accepting the adjustment of the individual and the social whole to each other as his educational ideal, he held that the curriculum of the school should consist very largely of those industries which produce ideal relations. Accordingly, in the elementary school which

he established, "weaving, sewing, cooking, and shopwork served as the introduction to other industrial activities, all which received a historical study." The social participation, together with motor-expression, on which Froebel insisted in the kindergarten are both present in Dewey's larger selection of occupational activities, and the selective freedom of the pupil is more ideally safeguarded. In this way significant, and therefore justifiable, content was given to such studies as science, history, and art, while instruction in such formal studies as reading, writing, and arithmetic found most effective motives in the "realism" of the tasks. Moreover, the social participation which occupations promote produce individual experiences about which it is interesting to talk and which are interesting to an audience, thus furnishing the best psychological motive for oral expression.

The "Annual Report of the Rockefeller Foundation" in 1916, outlining a curriculum based upon the principle that "the accessible world of the child should be used as his educational laboratory," may be regarded as an extreme interpretation of Dewey's occupational curriculum.

In his later interpretations of the teaching process, as we should expect from the observations which he was able to make of the child-mind at work, he calls attention to those processes by which the mind comes into relation with the objective world, and points out how largely our methods of teaching should produce and promote these processes. He calls the new way of approach the "problem method," and shows that, notwithstanding the common opinion handed down from Aristotle's time, this problem method of thinking (hunting, guessing) largely precedes and often supersedes both induction and deduction in their formal aspect.

Among the illuminating books which Doctor Dewey has contributed to the teaching profession are "School and Society," "How We Think," "Interest and Effort in Education," and "The Schools of To-Morrow." That the biological conception embodied in Doctor William James' "Talks to Teachers" and Doctor Hall's "Adolescence," together with the wholesome corrective studies of Doctor Judd, are in amazing harmony with Deweyism was only to be expected.

The Gary System.—As a rule, all the pupils of the ordinary city school do the same thing at the same time. In the morning they meet in the auditorium for general exercises, after which, except for brief periods of intermission, the day is spent in classrooms. This arrangement leaves either the auditorium or the classrooms unoccupied, or largely so, at alternate times. At Gary, Indiana, Superintendent William Wirt has worked out a "work-study-play" system of schools which might be characterized as an expansion of Deweyism in education and as a realization of the Rockefeller ideal. Here all school activities are carried on simultaneously in shops, laboratories, gymnasiums, swimming-pools, gardens, libraries, classrooms, and auditoriums. In other words, while some classes are studying or reciting in classrooms, others are working in shops and laboratories, still others are playing, reading, or busy in auditoriums. The plan gathers up and employs the whole child, and while it makes the school-day longer, it utilizes much time and space usually wasted, and enlarges the curriculum into a miniature world. Then, too, by housing double the number of pupils in the same space, it solves the "halftime" problem which exists in many large cities, and it probably saves some expense. Whether the Gary system can accommodate itself to cities which cannot readily place their industrial and economic means at the disposal of the school as necessary co-ordinates, or where those co-ordinates would hardly tend to enrich the curriculum, remains to be tried out. Experiments are in progress, and the likelihood is that if the system cannot be adopted as a whole it will stimulate salutary reconstructions.

The Montessori Method.—The educational experiments which Doctor Maria Montessori (1870-) has been making since 1907 at Rome have attracted unusual attention. There, in connection with her work in the University of Rome, she became interested in the educational possibilities of defective children, and, adapting materials used by Seguin, she devised "didactic apparatus" for the training of the senses. Her success with defectives brought her the opportunity of organizing infant schools for normal children in the poorest parts of Rome. Rooms opening out into a court were furnished according to her directions and called "The Children's Houses." The methods used in her experiments have been adopted by many schools in Italy and Switzerland and in other countries.

With Rousseau and Froebel, Madame Montessori assumes that "nature is right," and that accordingly it is the teacher's function to observe, test, and direct rather than control children in the educative process. In the administration of this generally accepted principle, however, she provides less for "group problems," or social participation, on the part of the little people, and isolates herself far more from this participation than Pestalozzi and Froebel.

Although in her selection and organization of didactic materials, such as silk bobbins, blocks, and cylinders, to wake the mind through the senses, she is evidently seeking to escape the narrow formalism of the Froebel "gifts," she is less fortunate than Dewey in her equally evident attempt to make the school a miniature world in her "The Children's Houses."

Madame Montessori has probably attained to greatest success in her attempt to teach such formal subjects as reading, writing, and arithmetic. She has analyzed these subjects into elementary activities, which, when mastered by the child, prompt the child, with very little help from the teacher, to master the subjects in question by spontaneous synthesis. The exhibits which Madame Montessori and her enthusiastic disciples carry with them on their lecture tours certainly justify the furor they produce, but can hardly be duplicated in languages less phonetic than the Italian. Perhaps the greatest contribution of Madame Montessori to education is the new sympathy with defective and subnormal children which her devotion to the cause inspires in teachers, and the resulting stimulus to the study of individual children in our schools.

Statistics and Mental Measurements.—Statistical reports, especially in the United States, came into prominent use in connection with the establishment of the National Bureau of Education and various subjoined agencies. Through the praiseworthy initiative of Doctor Edward L. Thorndike of Columbia University the statistical method has lately been devel-

oped into a veritable laboratory method of solving problems of education. In his "Educational Psychology" he contends that individual differences and the factors which condition them may be accurately stated in quantitative description, and in his "Mental and Social Measurements" he outlines methods of procedure. The scales of measurement which he has devised as tests of handwriting, arithmetic, and composition have prompted the devising of similar scales for spelling and drawing, and the likelihood is that it will not be long before educational experts will succeed in working out acceptable scales for all school work. In other words, this movement promises to retire all the older books on principles and methods of teaching to the ash-heap in favor of new treatments which shall base both the content and the methods of instruction on the findings of these experts. The day is not far distant when, in order to make them accessible to the rank and file of teachers, the necessary scales themselves will be found in books on teaching, and the teacher's library must contain extensive references. Nor will this scientific impulse expend its force in the correction of the school curriculum and class methods of instruction. Even now the statistical method has been developed into scientific surveys of city schools and the details of administration. The general "reconstruction" of education made necessary by the recent war will surely take the form of such surveys, and contribute largely to the differentiation of the rural schools from the city schools for which the natural conditions and course of events so loudly call.

Prospects.—The outlook is full of promise. That we are on the very edge of a golden age immeasurably

more glorious than that of ancient Athens cannot well be doubted. This appears especially from the vast extension of educational opportunities. The great universities open their doors to multitudes of ambitious teachers through summer sessions, thus inspiring and equipping leaders, and, while doing this, they bring the cumulating wealth of expert information to a vast population in all the walks of life through correspondence courses and seasonal courses organized for the benefit of farmers and the followers of other vocations.

In secondary education the "junior High School," combining the last two years of the elementary school with the first year of the high school, makes it possible to provide a multitude of boys and girls who cannot go through the high school with valuable vocational guidance and vocational training together with culture in studies which give such pupils control of higher things in life. At the same time, this "bridging" process, as statistics would seem to show, encourages a very considerable number of pupils to take the full course in our high schools for at least two reasons: first, because a somewhat intimate identification with maturer minds acts as an inspiring stimulus, and second, because the three years in question afford the pupils a better perspective.

Medical inspection and school sanitation, together with open-air schools for tubercular children, is still another extension of public privileges in our school system.

A most encouraging example of the "extension" movement is the larger use of the school plant by making it the "community centre." This movement makes it possible for the whole neighborhood to continue to go to school through public lectures and political debates, and, under efficient engineering, to remain identified with healthful recreation in the form of dramatic amusements, pageantry, moving pictures, field-day contests, etc.

The conflict between the claims of the individual and the social whole, and the dominance of the one set of claims over that of the other, so frequently the problem of the centuries, are, let us hope, about to find a true adjustment through proper recognition of the claims of God. That the ultimate triumph of Christian democracy over the organized and intrenched forces of a godless autocracy will conspire with other forward movements to produce the most glorious age in education is our fervent prayer.

In the meantime the Orient has become deeply interested in the Occident, and will surely become identified with the great brotherhood of Christian nations, by adopting and adapting their school systems. The prophetic dreams of the great educational reformers of all centuries seem sure to find their highest fulfilment.

REFERENCES

I. Monroe's "Cyclopedia of Education."

2. Annual Reports of United States Commissioner of Education.

3. Proceedings of the National Education Association.

4. Year-Books of the National Society for the Scientific Study of Education.

5. Graves' "History of Education," vol. III.

6. Parker's "History of Modern Elementary Education."

7. Cubberley's "Changing Conceptions of Education."

8. Dewey's "Schools of To-Morrow."

9. Montessori's "The Montessori Method."

10. Duggan's "History of Education."

II. Williams' "History of Modern Education."

12. Annual Reports of the Rockefeller Foundation.

QUESTIONS

r. What has been the "continued problem" in educational movements and what appears now to be in sight?

2. What method of inquiry and enrichment of curriculum are known as the "scientific movement"?

3. Examine the educative influences that helped to make Spencer.

4. What did he try to prove in his "Principles of Psychology"? Why does his book on "Education" deserve special study?

5. At what conclusions did Spencer arrive in the first chapter of "Education" and by what argument? Challenge his conclusions with counter-arguments.

6. State the principles of pedagogy which Spencer undertook to establish by scientific argument in his second chapter. State his biological conception of education as "recapitulation," and argue it pro and con. Read Spencer himself on his last principle and report fully.

7. For which of Rousseau's principles does Spencer contend in his chapter on moral education? With what generally accepted principle does his conclusion conflict, and why is it serious when carried to logical limits? What do we accept with satisfaction in this chapter?

8. Show that Spencer in his last chapter on education was at his best when he ceased to be merely utilitarian and rose to moral heights. What was the fine purpose of this chapter?

9. Why, in spite of its weaknesses, must Spencer's book on education be looked upon as an invaluable contribution to the cause of education?

10. Account for the present relation between employer and employee, and explain the new burden which this situation puts upon the school.

11. What provisions have Germany, France, England, and the United States made for vocational education?

12. What educational provisions for the production of commercial experts do these countries now make, and why?

13. Why was so tardy a recognition accorded to agriculture in educational systems, and to what position of honor has it now attained in Europe? Trace the course of this movement fully in the United States. 14. How has the loss of church control over education affected morals in France, Germany, England, and the United States?

15. What new industrial relations have made it important to emphasize Christian morality in-aducation?

16. Why are denominational costges such a powerful moral stimulus? How have other colleges recently manifested the sense of moral stewardship? To what extent does this sense of stewardship account for the presence of Christian Associations in higher institutions?

17. Why does concern for public morals produce respect for Sunday-schools?

18. How largely is it due to this sense of Christian stewardship that there is so much co-operative effort in providing educational facilities for unfortunates?

19. Who was Edward Seguin? What have different countries done with the stewardship which he made possible?

20. Who was Abbé de l'Epee? What did he contribute to the cause of Christian stewardship in education?

21. Who was Abbé Haüy? What did he contribute? Consult references on Laura Bridgman and Helen Keller.

22. Read up on the education of American negroes, Indians, reform schools, etc.

23. What were some of the educative influences that helped to make Colonel Francis W. Parker? Explain the "Quincy movement" and Parker's work in Illinois.

24. What educative influences helped to produce Doctor John Dewey? What was the reasoning process that prompted his Chicago "occupational experiment"? To what extent did the Dewey occupations satisfy the requirements of Froebel? Explain the value of the larger selective freedom of the Dewey occupations. What is meant by the "problem method" which Dewey proposes? Connect the Rockefeller Foundation with Dewey.

25. Study the making of Superintendent William Wirt of Gary, Indiana. How does his "work-study-play" system differ from the ordinary school-day? Which of these three celebrated educational experiments—the Quincy movement, the Dewey occupations, the Gary system—satisfies the Rockefeller conception of education most completely? Why? What accepted principles of education are embodied in the Rockefeller conception? With which cherished ideals is the Rockefeller conception seriously out of harmony?

26. Find, if you can, how the training and "world" of Madame Montessori 'bed to make her an educational reformer. Explain the "addactic applicatus" which she employs and "The Children's Houses" which she has organized. Explain her method of teaching such subjects as reading, writing, and arithmetic. Examine her claims and contributions, and give her full credit.

27. Who is Doctor Edward L. Thorndike? What are his "scales of measurement" and what are the purposes? What educational problems are capable of solution by means of scientific surveys? Refer to some celebrated surveys.

28. What is the promise of our educational outlook? What "extension movements" confirm this promise? What New Age is in sight?

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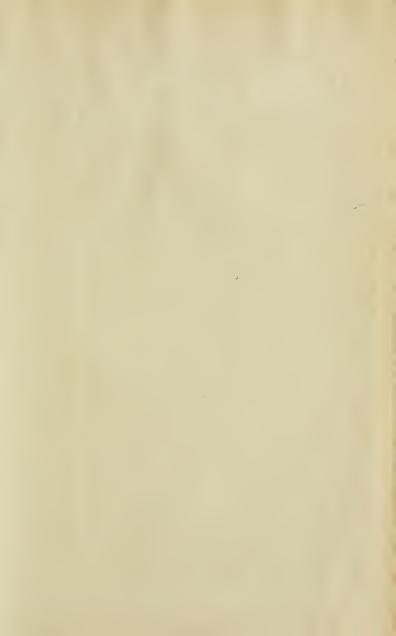
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